

# O Processo de comunicação dos astrônomos com o público **(o Modelo “linear”)**

Jorge Meléndez

Aga 0421

# Qual a melhor maneira de divulgar um resultado científico ao público?

- ~~Não adianta, o público não vai entender~~
- ~~Gostaria mas não tenho tempo para isso~~
- Dar uma palestra?
- Divulgar nas mídias sociais?
- Astrônomo contata amigo jornalista?
- Esperar contato dos jornalistas?

# Público-alvo

- Brasil 203 milhões
- Mundo 7,2 bi



# Divulgação do Júpiter gêmeo

Jornal Nacional:  $67000 \times 3 \times 24$  pontos =  
4,8 mi grande São Paulo





# Divulgação do Júpiter gêmeo

FOLHA DE S. PAULO

## Mensageiro Sideral

De onde viemos, onde estamos e para onde vamos

### O primeiro exoplaneta brasileiro

POR SALVADOR NOGUEIRA

15/07/15 15:23



< 471

OUVIR O TEXTO

O ESO (Observatório Europeu do Sul) escolheu o dia seguinte à passagem da primeira espaçonave enviada da Terra por Plutão para anunciar a descoberta do primeiro exoplaneta brasileiro. Parabéns.



O GLOBO

### Descoberto planeta extrassolar 'gêmeo' de Júpiter

Na busca por uma 'Terra 2', equipe liderada por brasileiro identificou objeto na órbita de estrela parecida com nosso Sol

POR CESAR BAIMA

15/07/2015 11:00 / ATUALIZADO 15/07/2015 13:11

# GALILEU

## Astrônomos brasileiros descobrem gêmeo de Júpiter orbitando gêmea do Sol

Busca por um Sistema Solar 2.0 acaba de ganhar um de seus mais promissores candidatos

16/07/2015 - 08H07 / ATUALIZADO 08H07 / POR ANDRÉ JORGE DE OLIVEIRA

@grupofolha.com...  
Facebook

buscar

ESTADÃO  
Ciência

### 'Novo Júpiter' dá pista para Terra 2.0

GIOVANA GIRARDI - O ESTADO DE S. PAULO  
15 Julho 2015 | 12h 36

Gêmeo do gigante do Sistema Solar orbita estrela parecida com o Sol, o que sugere a existência de um planetinha como o nosso

# Divulgação do Júpiter gêmeo



## Newly discovered Jupiter twin hints at new solar system similar to Earth's



By **Ben Brumfield**, CNN

🕒 Updated 1434 GMT (2134 HKT) July 16, 2015



## Jupiter's 'Twin' Found: Is This Solar System 2.0?



by **Elizabeth Howell**, Space.com Contributor | July 16, 2015 08:35am ET



Encuentran gemelos de Júpiter y del Sol

Las posibilidades de encontrar un sistema planetario como el nuestro parecen cada vez más cercanas.

## Scoperto un gemello di Giove che ruota attorno al sosia del sole

**16/07/2015 - 15:35** - Un gemello di Giove orbita attorno a una stella simile al nostro sole. A scoprirlo è stato un team internazionale di astronomi utilizzando il telescopio da 3,6 metri dell'Eso. L'esopianeta si trova a una distanza dalla sua stella (HIP 11915) simile a ...

# Qual a origem das notícias científicas?

Social media (e.g. Instagram, Face, Twitter)

Press releases

Announcements from scientific institutions

Scientists giving public talks

Press conferences

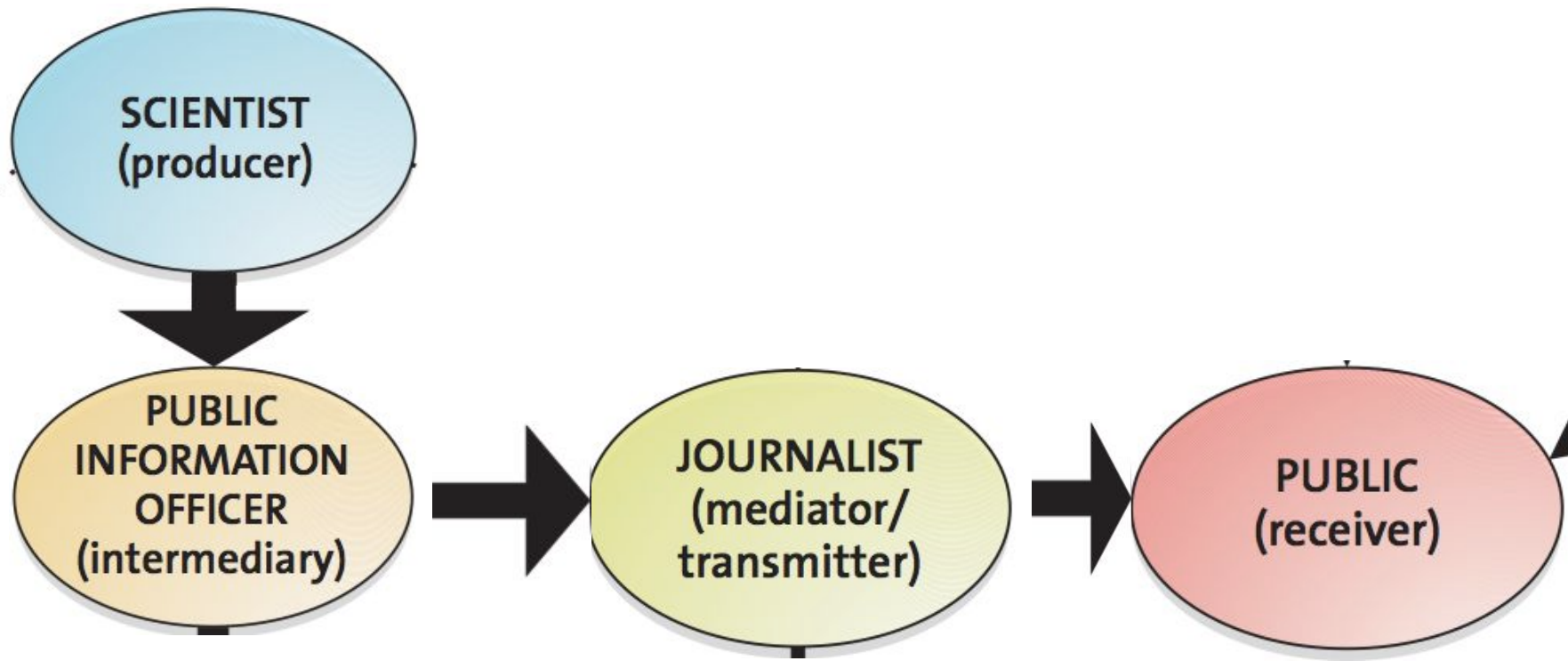
Scientists contacting journalists

Journalist attending scientific meetings

Science journalist reading arXiv

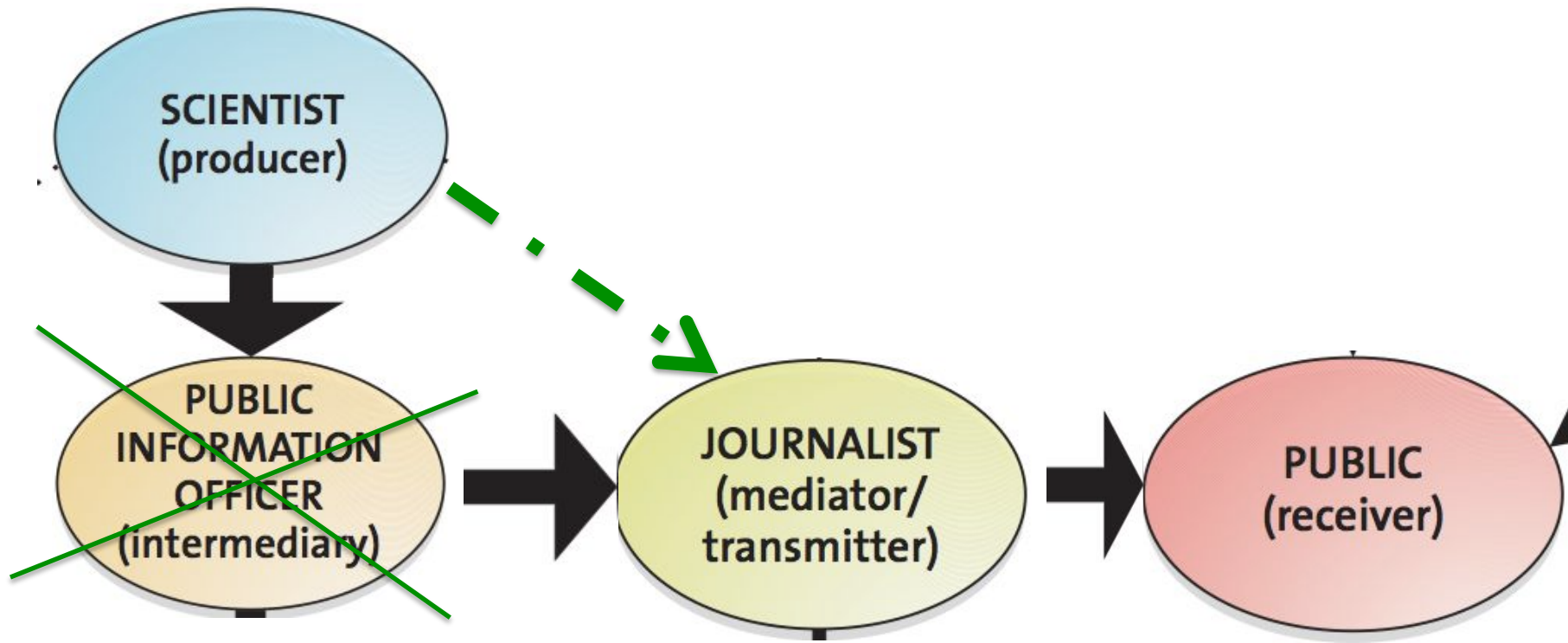
Journalists contacting scientists

# O Modelo linear (melhor custo/benefício?)

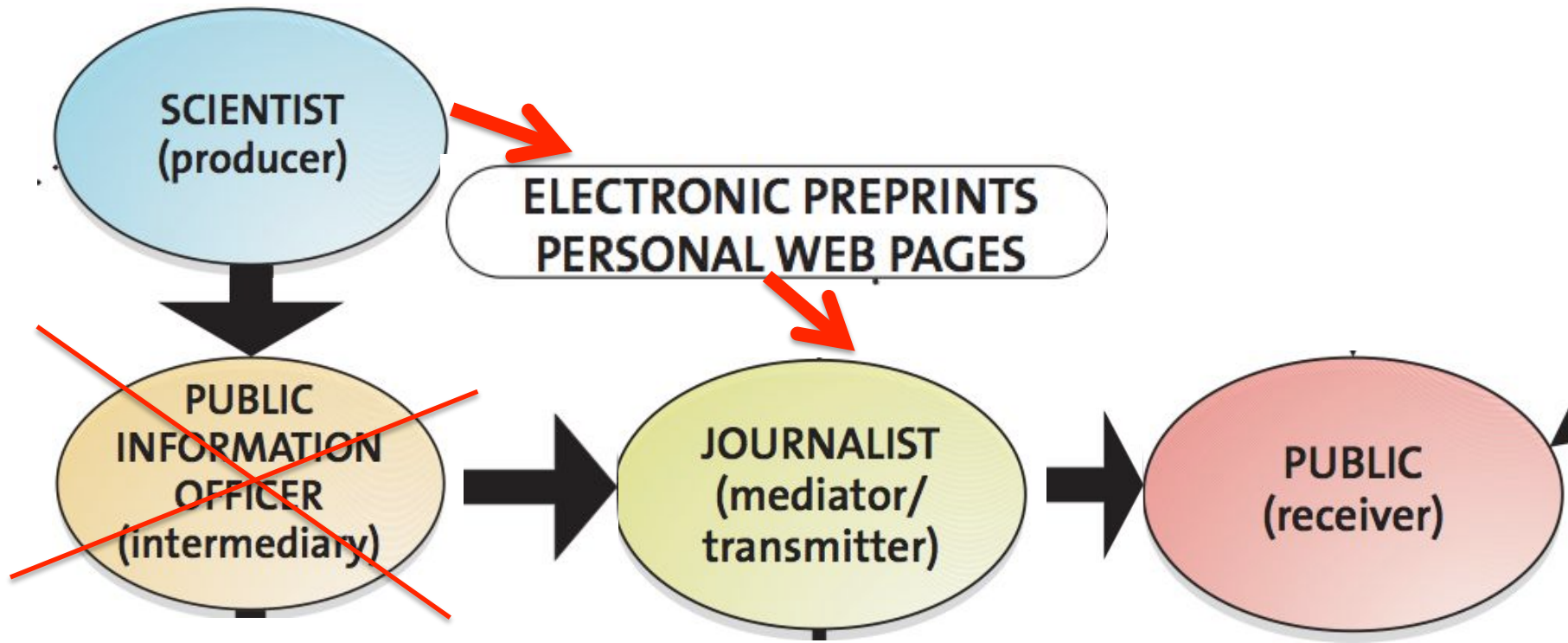




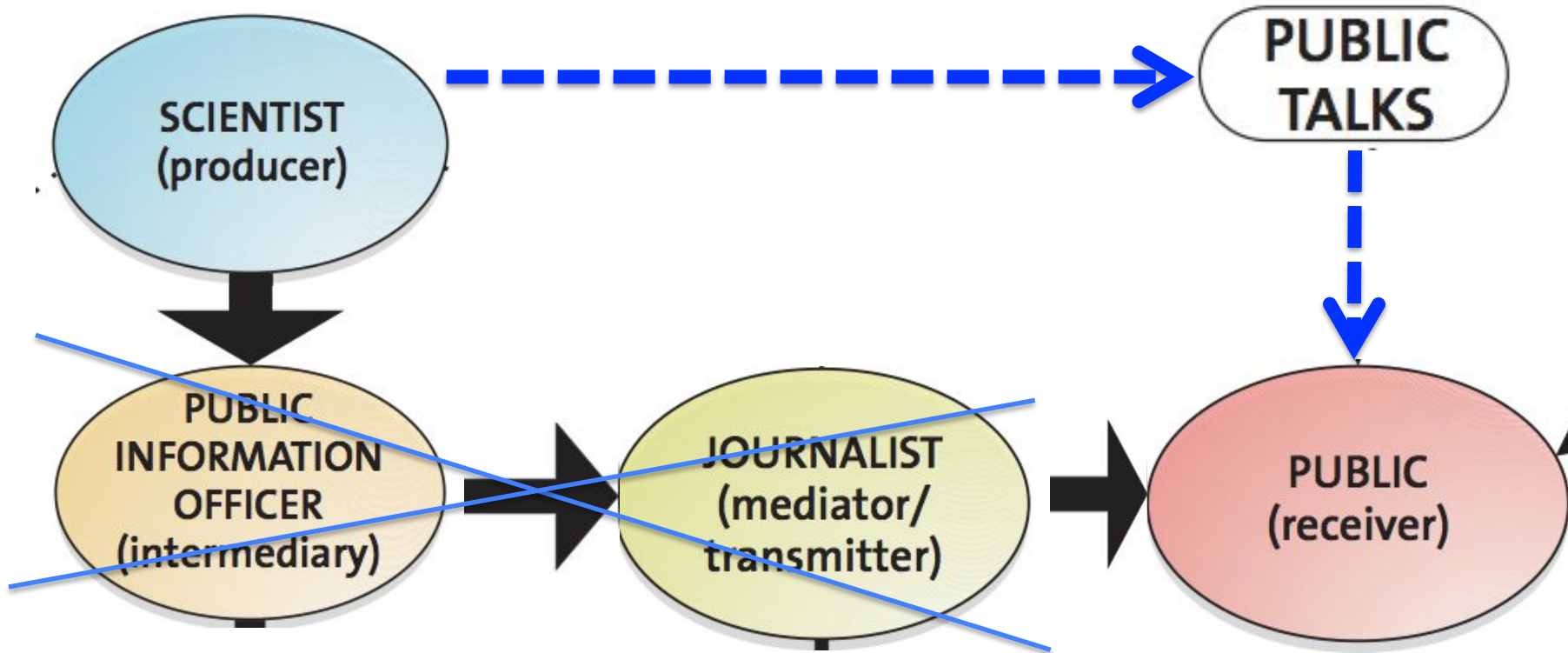
# Variações ao modelo linear: astrônomo contata diretamente a jornalista



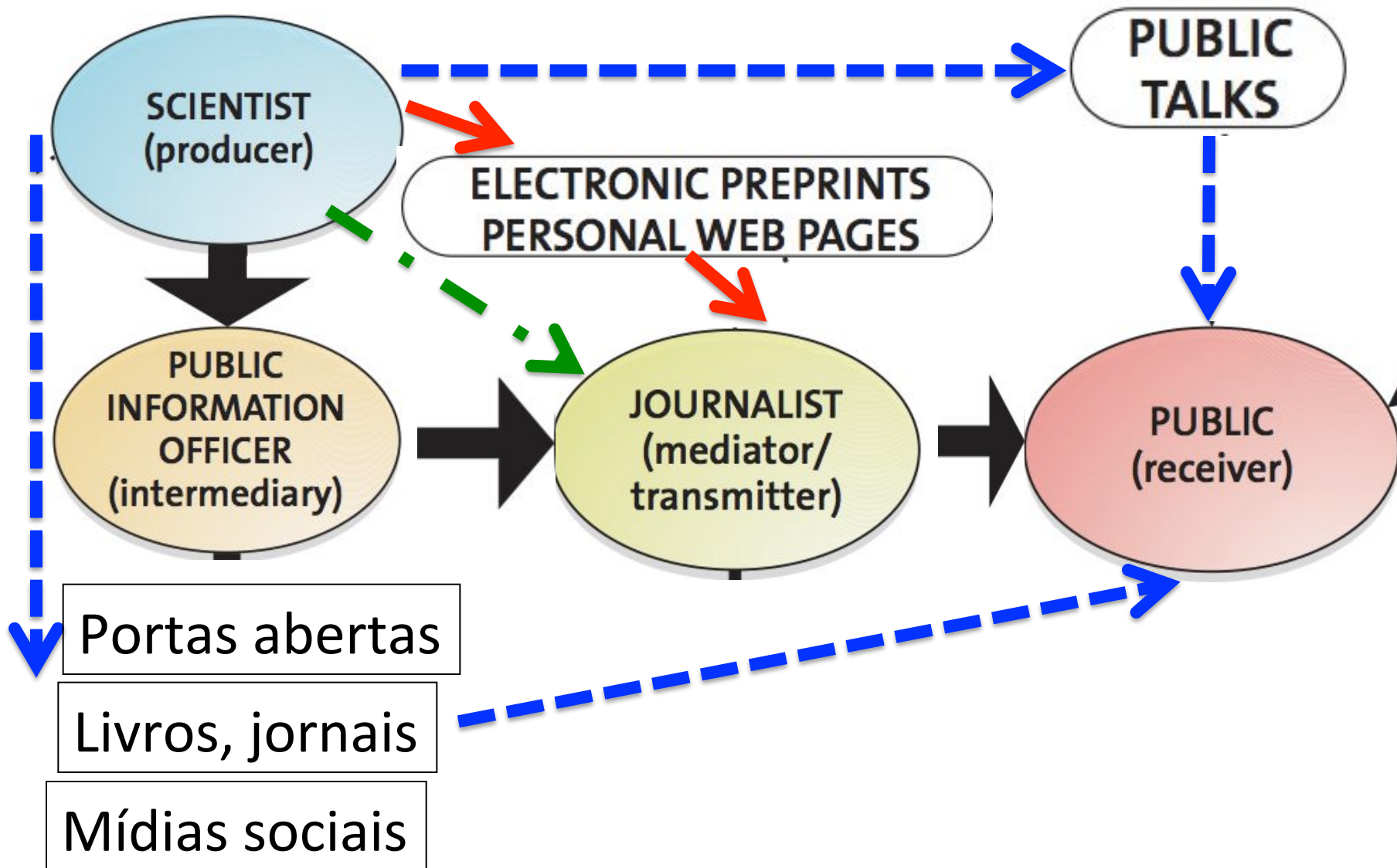
# Variações: astrônomo posta artigo no arXiv; jornalista se interessa no artigo



# Variações: astrônomo oferece palestra para o público



# Existem diversas variações ao modelo linear





# O Modelo linear (melhor custo/benefício?)

## Vantagens:

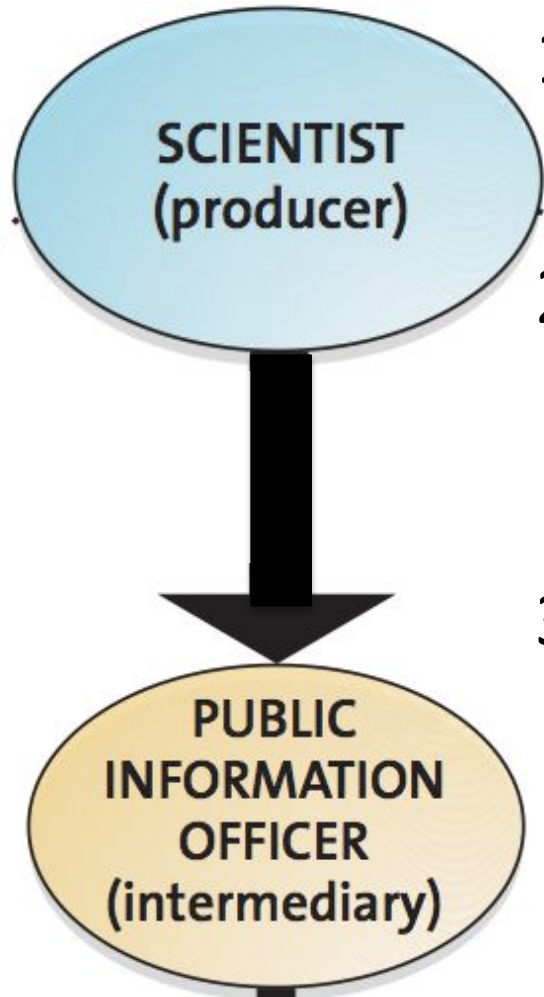
- menos tempo investido pelo cientista para o tamanho da audiência

## Desvantagens:

- Menos contato direto com o público

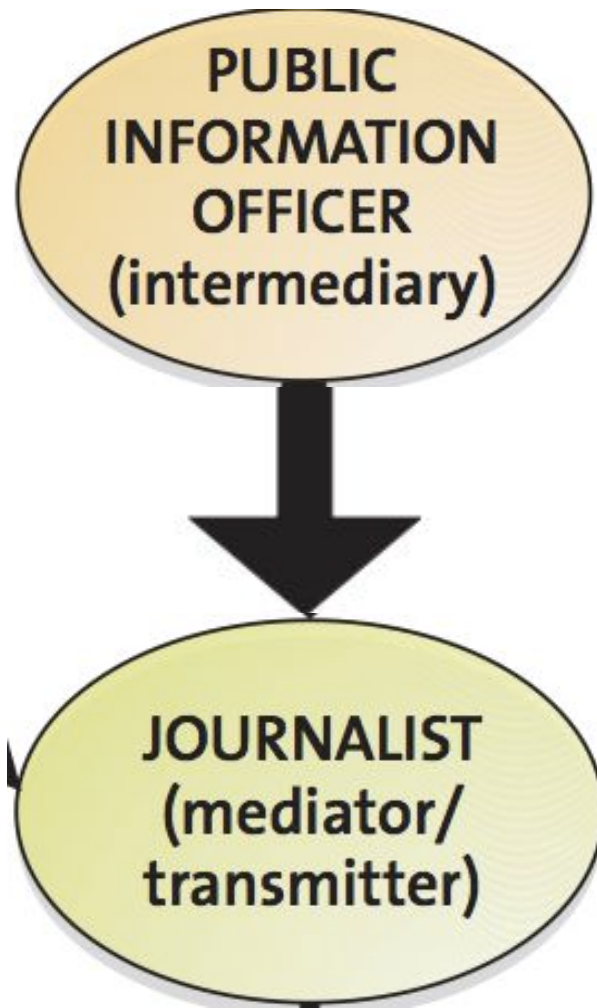


# O Modelo linear: do astrônomo ao PIO



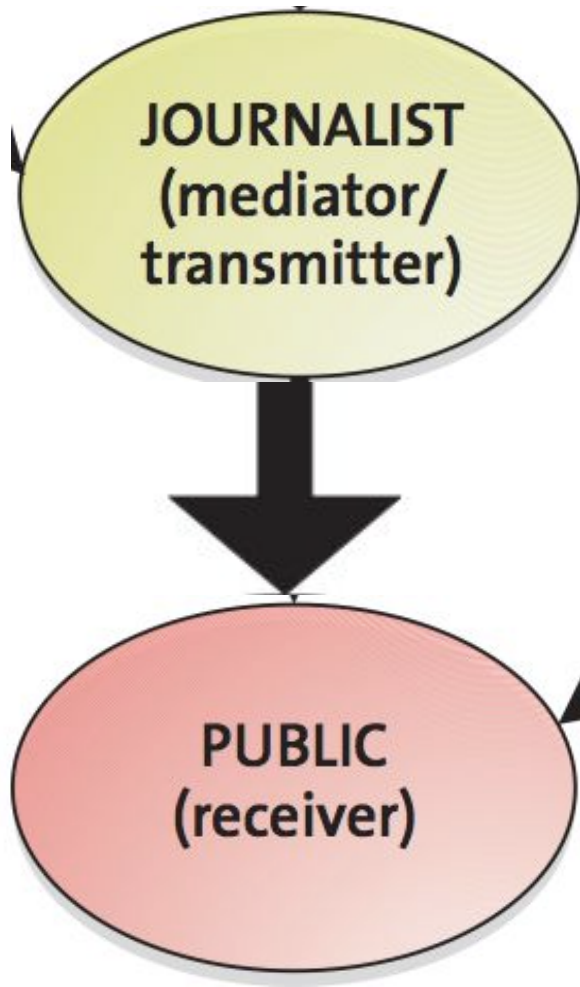
1. New results → artigo → referee (usually from 2 months - 1 year)
2. Astrônomo contata PIO (não enviar artigo ao arXiv, especialmente Science, Nature)
3. PIO: julgar se o resultado é “interessante” (para o público) e se merece um *press-release*

# O Modelo linear: do PIO ao jornalista



1. Rascunho do *press-release* pelo PIO (em colaboração com cientista)
2. Release é aprovada pelo cientista
3. Em grandes organizações (p.ex. ESA), comitê revisará a *release* para avaliar conflitos científicos e políticos
4. A *press-release* será disponibilizada para jornalistas

# O Modelo linear: do jornalista ao público



1. **Jornalistas generalistas** (cobrem qq matéria) e **científicos** (aprenderam ciência ao longo dos anos) completarão a matéria baseados no *release*, pesquisa, e talvez entrevistas a cientistas.
2. **Jornalistas científicos** tem contatos bem estabelecidos com cientistas; também, tem menos chances de escreverem coisas erradas.



# The unwritten “contract” between scientists & PIO

Scientist delivers to PIO



PIO delivers to scientist


- Resultados relevantes
- Material de consulta
- Explicações
- Paciência
- Respostas rápidas
- Ideias para ilustrações
- Revisão do *press release* e imagens
- Disponibilidade ao PIO e jornalistas

- Apoio para promover a pesquisa do cientista
- Uma visão “outsider” do mais interessante do trabalho
- Texto do *press release*
- **Ilustrações do *release***
- Ampla distribuição na mídia (e outros)

# The “contract” between the PIO and journalist

PIO delivers to journalist	↔	Journalist delivers to PIO
Good news stories picked from the best scientific resources		Visibility to science
Summarised info		(Positive) publicity for organisation or project
Excellent visuals <b>Falta “manpower” na USP</b>		A wide dissemination of the information
Contacts for scientists		
Some exclusive stories		
Special services if needed		
Additional info: scientific papers, web links, factsheets etc.		
A steady flow of news stories		

# The “contract” between the journalist & the public

<b>Journalist delivers to end-user</b>		<b>End-user delivers to journalist</b>
Excellent journalistic writing		Payment
Selection of the best results		Loyalty
Reasonable or good visuals		
Timely delivery		

# Potenciais conflitos entre cientistas e jornalistas

Journalists and scientists often operate at opposite ends of the communication spectrum. As Treise & Weigold (2002) express it:

*“... scientists are frequently disappointed or angry about media coverage of their research, their fields, or science generally. Journalists report frustration with the difficulties of describing and understanding important scientific findings and with the low levels of support provided by their news organisations for reporting on science news”.*



# Devemos compreender que cientistas e jornalistas às vezes valorizam aspectos diferentes

<b>Scientist</b>	<b>PIO</b> Public information officer	<b>Journalist</b>
Values advanced knowledge Porem deveria saber como se insere no contexto geral	Uses the advanced knowledge in a broad context	Values diffuse knowledge
Values technical language	Reshapes technical language into simple language	Values simple language
Values near certain information	Uses facts, but also more speculative indications to give perspective	Values indications
Values quantitative information	Balances facts with emotional and personal accounts	Values qualitative information

# Devemos compreender que cientistas e jornalistas às vezes valorizam aspectos diferentes

Scientist	PIO	Journalist
Values near complete information	“Cuts through” when the results are trustworthy, but perhaps still not complete	Values incomplete information
Values narrow information	Uses the frontline narrow science to open doors to the broader context	Values comprehensive broad spectrum information
Specialist in his/her area	Specialist in communicating science to the general public	Generalist
Tem uma boa base teórica	Understands theory and applies it in the real world context	Pragmatist

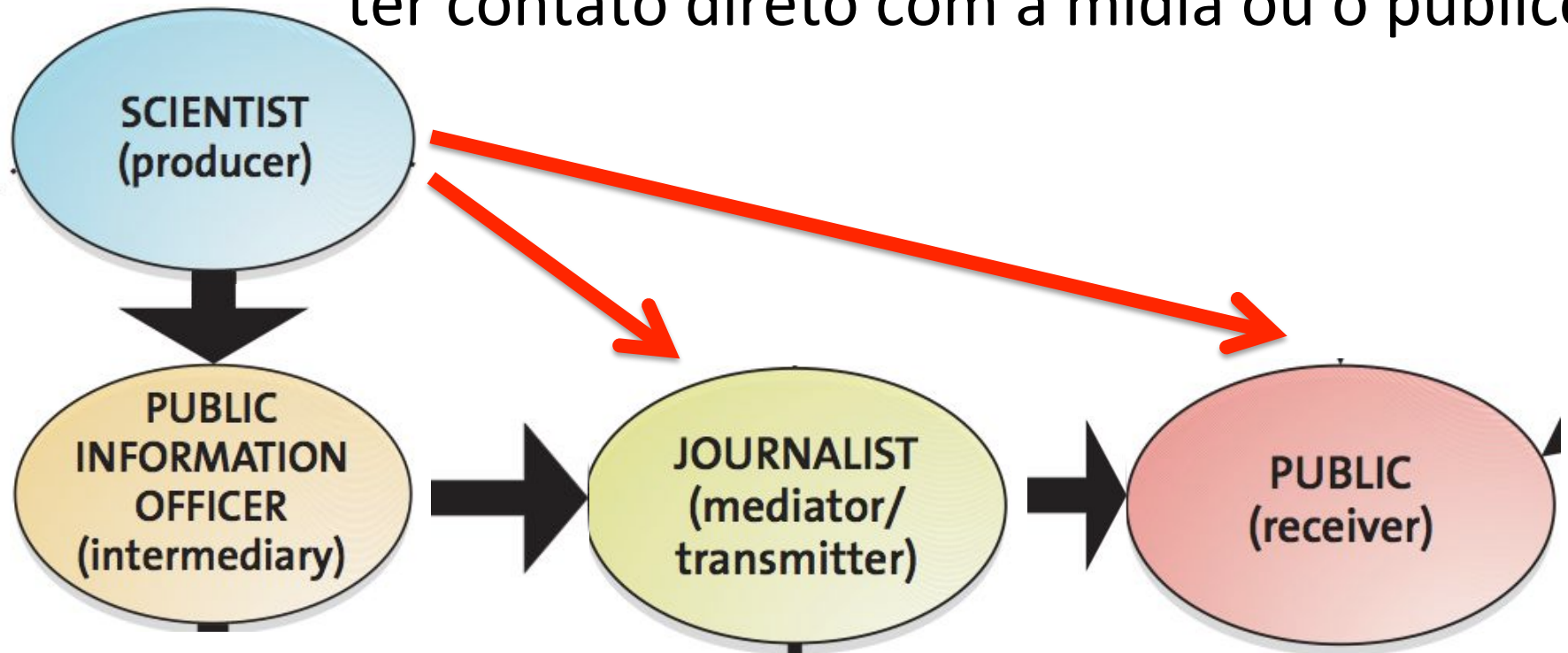
# Devemos compreender que cientistas e jornalistas às vezes valorizam aspectos diferentes

<b>Scientist</b>	<b>PIO</b>	<b>Journalist</b>
Values knowledge for knowledge's sake	Focuses on the knowledge that is relevant to society	Focuses on what is relevant to society
Is cumulative	Is very picky with which information to accumulate	Is non-cumulative
Is slow	Can develop stories over long time, but always delivers on time	Is fast
Enjoys high professional status	Respects all other actors	Is in the lower ranks of professional status

# O modelo linear no Brasil

Na prática, o modelo é difícil de ser aplicado no Brasil devido à falta de PIOs ou de pouco apoio aos PIOs

Mesmo contando com o PIO, às vezes o cientista pode ter contato direto com a mídia ou o público

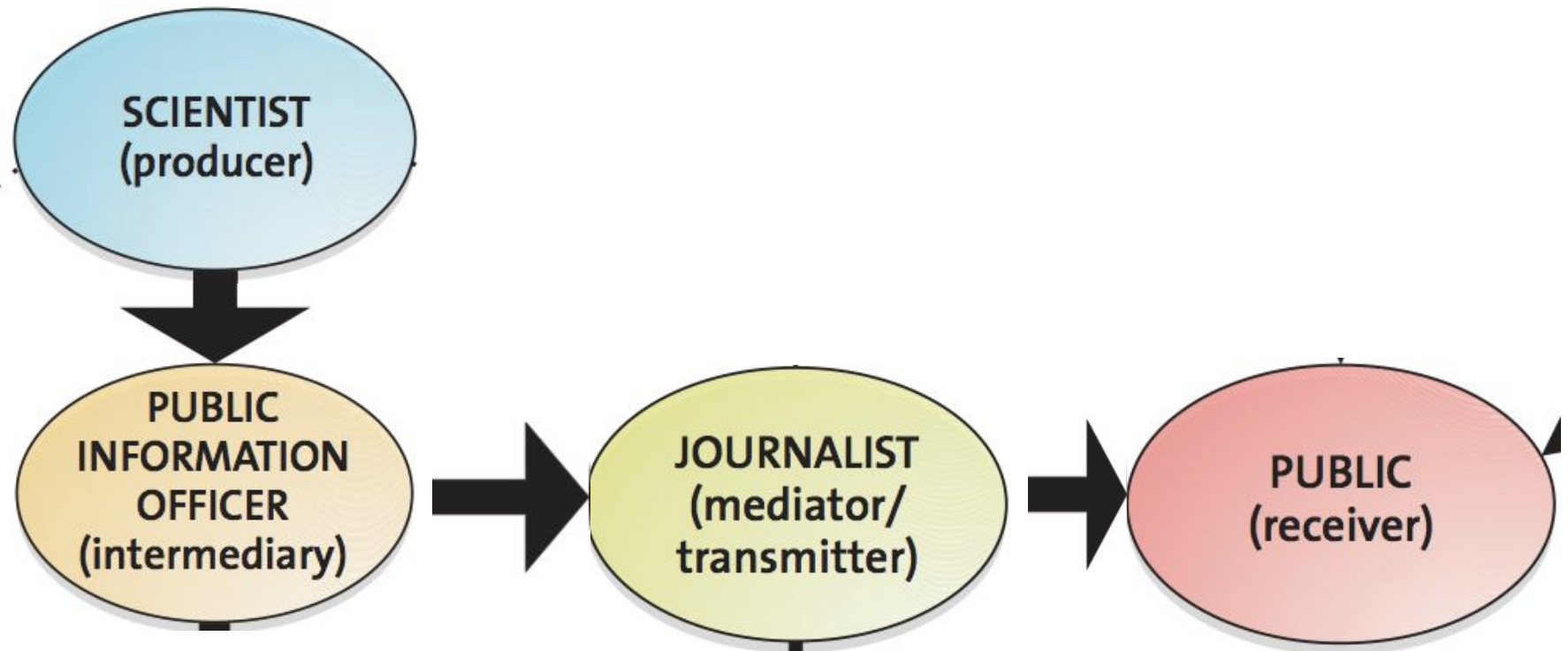




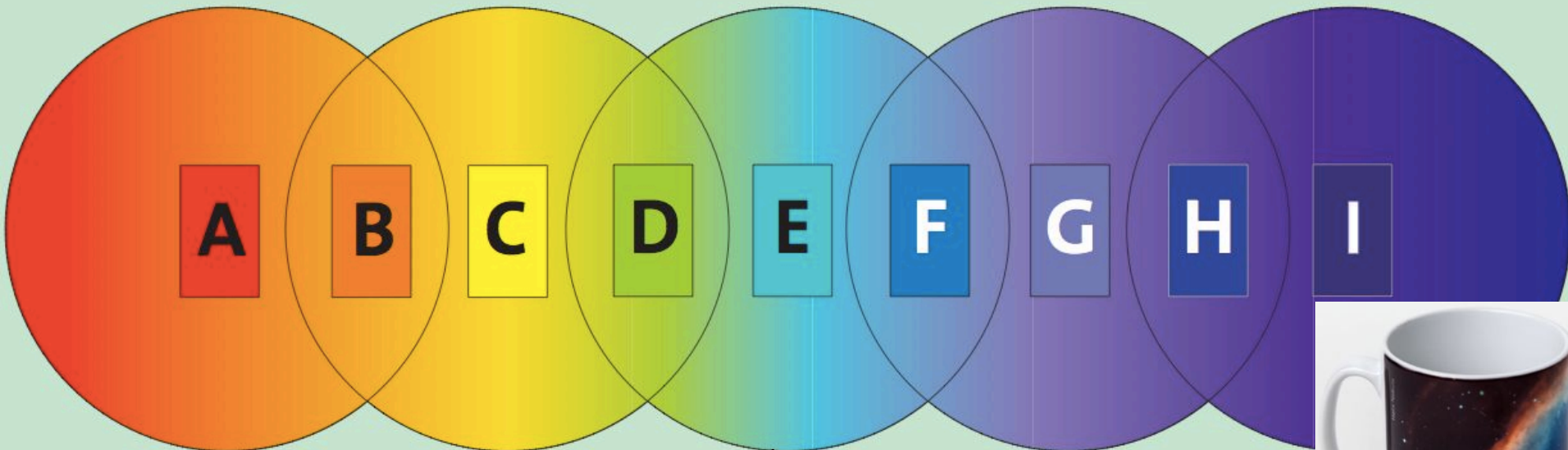
***Public Information Officers (PIO)*** trabalham na ***Education and Public Outreach (EPO)*** Office.

Também conhecida como:

**Setor de Comunicação** ou **Setor de Imprensa**



# Possíveis atividades da *Education and Public Outreach* (EPO)



Curriculum-driven: textbooks, teacher training, undergrad courses ...

Educational programmes at planetaria, museums, libraries, parks ...

Museum exhibits, observing trips (eclipses, comets ...), star parties ...

Planetarium shows, IMAX movies, public talks, hands-on demos ...

TV/radio documentaries, podcasts, magazine articles, popular books, webchats, weblogs, cultural/scientific events, CDs ...

Photo releases, popular brochures ...

Press releases, press conferences, press kits, media interviews, media courses for scientists ...

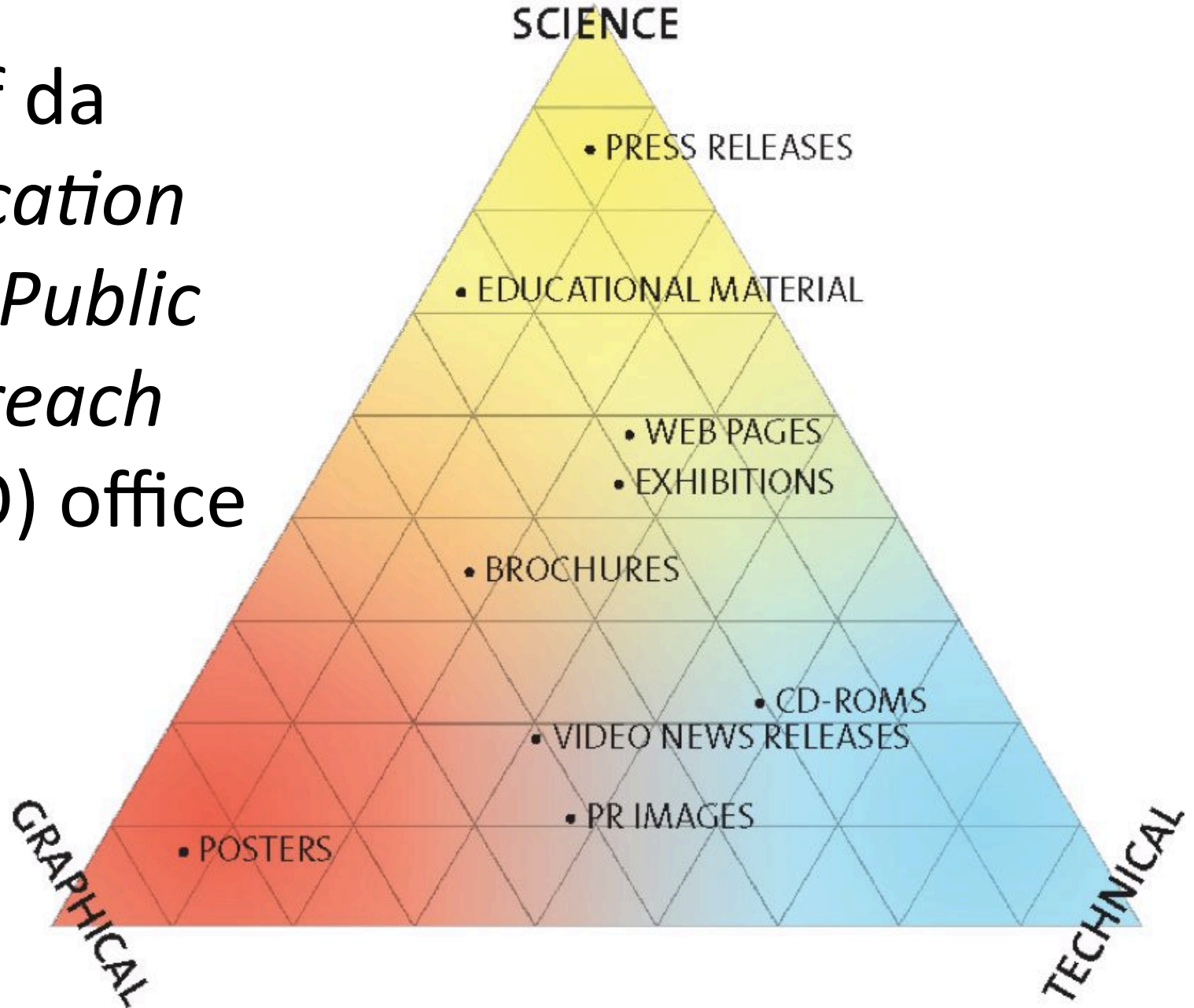
Exhibition booths, technical brochures, newsletters, annual reports, posters, postcards ...



Mercadorias: pins, stickers, caps, t-shirts, bookmarks, mugs ...

SCIENCE

Staff da  
*Education  
and Public  
Outreach*  
(EPO) office



## Staff, *Education and Public Outreach* (EPO) office

- Coordinator
- **Must: Public information Officer** (likely a journalist)
- Graphic designer
- Press officer (web e contato direto com a mídia)
- Educator
- Internal communicator (newsletters, reports, take care of visits)
- Technical communicator (webmaster, etc)
- Editor, proof reader
- Secretary



# Equipe de *Education and Public Outreach* do ESO



## Head of education and Public Outreach

### Lars Lindberg Christensen

Head of ePOD

## Chefe da equipe EPO do ESO

Lars is a science communication specialist heading ESO-Hubble outreach group in Munich, Germany, where he is responsible for public outreach and education for VLT, La Silla, ALMA, ELT, and ESA's part of the Hubble Space Telescope.

Email: [lars@eso.org](mailto:lars@eso.org)  
Tel: +49 89 3200 6761

### Objectives

1. Management and coordination of ESO's EPO efforts
2. Setting the strategic goals for the EPO work
3. Implementation of the EPO Strategy and optimising its return-on-investment



Susana Almagro Garcia  
Administrative Assistant



Richard Hook

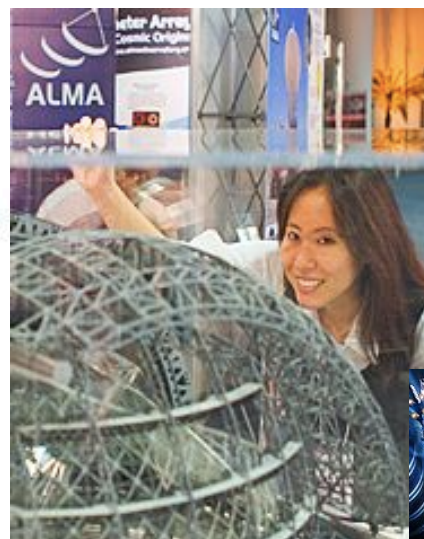
Public Information Officer / Image Processing

Richard was originally from England and has an MA in Physics from Oxford. After some time spent at the Royal Greenwich Observatory and in Australia and London, he has spent the last twenty years in the Space Telescope European Coordinating Facility at ESO and has mostly worked on Hubble image processing. He was one of the developers of the "drizzling" technique for Hubble images and helped with the preparation of the Hubble Deep Fields and GOODS data. He also has a basement full of telescopes that, alas, rarely get used.



Mathias Andre

Web & Advanced Projects Coordinator



Raquel Yumi Shida

Web Content Coordinator





# Equipe de *Education and Public Outreach* do ESO



ESO — Reaching New Heights in Astronomy



**Susana Almagro Garcia**

Administrative Assistant

Email: [salmagro@eso.org](mailto:salmagro@eso.org)

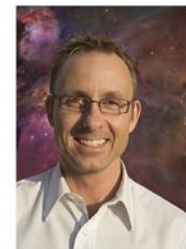
Tel: +49 89 3200 6291

**Secretary**

## Objectives

1. Administrative, Procurement and Budget Support
2. Travel Logistics and Internships Support
3. Events and Project Coordination

ESO-Hubble outreach group in Munich, and education for VLT, La Silla, ALMA, ELT, and



1. Management and coordination of ESO's EPO efforts
2. Setting the strategic goals for the EPO work
3. Implementation of the EPO Strategy and optimising its return-on-investment



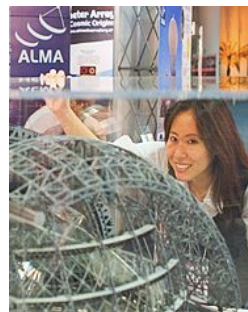
**Richard Hook**

Public Information Officer / Image Processing



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator





# Equipe de *Education and Public Outreach* do ESO



## PIO com várias tarefas

1. Public Information Officer work: coordination/implementation of outreach projects, writing of press releases, web pages, announcements, ESOcasts
2. Image processing consultancy and occasionally assistance with image processing

**Richard Hook**

Public Information Officer / Image Processing

Richard was originally from England and has an MA in Physics from Oxford. After some time spent at the Royal Greenwich Observatory and in Australia and London, he has spent the last twenty years in the Space Telescope European Coordinating Facility at ESO and has mostly worked on Hubble image processing. He was one of the developers of the "drizzling" technique for Hubble images and helped with the preparation of the Hubble Deep Fields and GOODS data. He also has a basement full of telescopes that, alas, rarely get used.

nich,  
MA, ELT, and



**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator





# Equipe de *Education and Public Outreach* do ESO



## Objectives

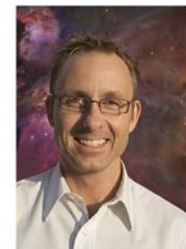
## Suporte avançado de informática (inclusive software p/imagens)

1. Development and implementation of our EPO media archive system
2. Development of other technical science communication infrastructure
3. Development of outreach image processing tools

### Mathias Andre

Web & Advanced Projects Coordinator

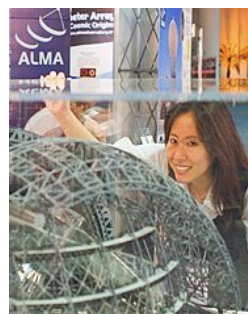
Mathias obtained a MSc in Computer Science in England and worked for several years as a Unix system administrator and IT Operations Manager before joining the ESO outreach group to tackle new challenges as Web and Advanced Projects Coordinator.



### Richard Hook

Public Information Officer / Image Processing

Susana Almagro Garcia  
Administrative Assistant



Raquel Yumi Shida

Web Content Coordinator

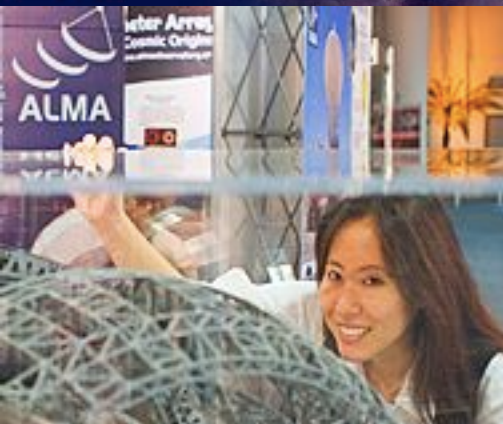




# Equipe de *Education and Public Outreach* do ESO



ESO — Reaching New Heights in Astronomy



**Raquel Yumi Shida**

Web Content Coordinator

## Conteúdo Web

### Objectives

1. Updating, maintenance, design and development of web sites
2. Developing, organizing and publishing web content

Raquel obtained a professional degree in architecture and urban planning at the University of São Paulo in Brazil, her home country. As an undergraduate student she also took classes in various fields of science and became an avid amateur astronomer, publishing data and articles on galactic and extragalactic stars. Since then she has worked at the Astronomy Department at the University of São Paulo, at NASA/STScI and at ESA/Hubble, doing both scientific research and astronomy outreach. Today she is responsible for creating visual and textual content and managing several websites for ESO, IAU and ESA/Hubble.



**Richard Hook**

Public Information Officer / Image Processing

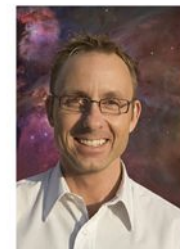
**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator

the outreach group in Munich,  
tion for VLT, La Silla, ALMA, ELT, and



on-investment



## Coordenadora de Publicações impressas



**Jutta Boxheimer**

Print Coordinator

Email: [jboxheim@eso.org](mailto:jboxheim@eso.org)

### Objectives

1. Print Design Coordination, Visual identity oversight
2. Layout of print products



**Richard Hook**

Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator

### Head of education and Public Outreach

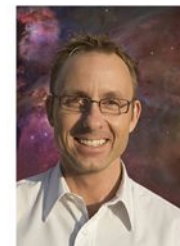
**Lars Lindberg Christensen**  
Head of ePOO

Lars is a science communication specialist heading ESO-Hubble outreach group in Munich, Germany, where he is responsible for public outreach and education for VLT, La Silla, ALMA, ELT, and ESA's part of the Hubble Space Telescope.

Email: [lars@eso.org](mailto:lars@eso.org)  
Tel: +49 89 3200 6761

#### Objectives

1. Management and coordination of ESO's EPO efforts
2. Setting the strategic goals for the EPO work
3. Implementation of the EPO Strategy and optimising its return-on-investment





# Equipe de *Education and Public Outreach* do ESO



## Assistente de publicações impressas

**Mafalda Martins**

Print Assistant

Email: [mmartins@eso.org](mailto:mmartins@eso.org)

Tel: +49 3200 9020

### Objectives

1. Print layout assistance
2. General graphics: posters, illustrations etc.

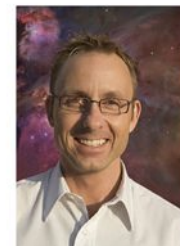
#### Education and Public Outreach

Christensen

Communication specialist heading ESO-Hubble outreach group in Munich, is responsible for public outreach and education for VLT, La Silla, ALMA, ELT, and Hubble Space Telescope.

761

and coordination of ESO's EPO efforts strategic goals for the EPO work on of the EPO Strategy and optimising its return-on-investment



**Richard Hook**

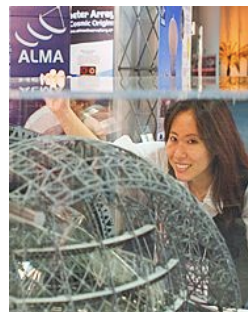
Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator



## Animações / Gráficos



**Martin Kornmesser**

Animations/Graphics Coordinator

### Objectives

1. Graphical image processing
2. 2D and 3D modelling and animation
3. Misc. motion and still graphics: video editing, encoding, web design

Munich,  
ALMA, ELT, and



**Richard Hook**

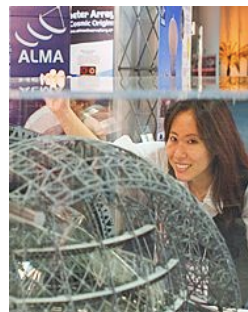
Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator







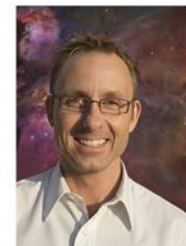
## Coordenador de vídeo

**Herbert Zodet**

Video Coordinator

1. Production of video material for broadcast, online and DVD use
2. Maintenance of the online/offline video archive
3. Writing of audiovisual scripts

in Munich,  
La, ALMA, ELT, and



**Richard Hook**

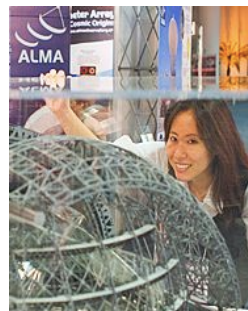
Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator







## Assistente de animações e ilustrações

### Objectives

1. Artist's impressions
2. 3D modelling and rendering
3. General graphics: posters, illustrations etc.

**Luis Calçada**

Animations Assistant

He studied Physics/Applied Math (Astronomy) but eventually gave up on the idea of becoming a real scientist. Got his first real job on a science centre in Portugal, where for 6 years he's discovered, developed and matured his skills in visual science communication. At ESO he's part of the latter steps of the chain, in a group which tries to deliver to the public the extraordinary science there developed in the exciting and inspiring manner it deserves. His tools of choice are Maxon's Cinema 4D, Adobe's Photoshop and After Effects and a Wacom Intuos 3. When he has the time, he also likes to do some photography, a sample of which you can see on his flickr page



**Richard Hook**

Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



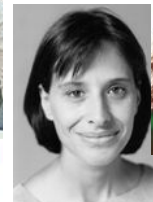
**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator



utreach

ialist heading ESO-Hubble outreach group in Munich,  
ublic outreach and education for VLT, La Silla, ALMA, ELT, and  
pe.

ESO's EPO efforts  
EPO work  
gically and optimising its return-on-investment





# Equipe de *Education and Public Outreach* do ESO

## Coordenador de exposições

### Objectives

#### 1. Organisation and production of ESO exhibitions



**Edmund Janssen**

Exhibitions Coordinator

#### Occupations held previously:

- Ministry of Agriculture and Fisheries, The Hague - Cartographer, graphic designer, deputy department head.
- Government Printing Office, The Hague - Offset printer.

#### Education:

- Royal Academy of Arts, The Hague - BA, Photography and Graphic Design.
- Grafisch Lyceum Rotterdam, BA, Classical graphic techniques.
- Government Printing Office, The Hague - apprenticeship, Classical Graphic techniques.



**Richard Hook**

Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator



#### Head of education and Public Outreach

**Lars Lindberg Christensen**  
Head of ePOO

Lars is a science communication specialist heading ESO-Hubble outreach group in Munich, Germany, where he is responsible for public outreach and education for VLT, La Silla, ALMA, ELT, and ESA's part of the Hubble Space Telescope.

Email: [lars@eso.org](mailto:lars@eso.org)  
Tel: +49 89 3200 6761

#### Objectives

1. Management and coordination of ESO's EPO efforts
2. Setting the strategic goals for the EPO work
3. Implementation of the EPO Strategy and optimising its return-on-investment





# Equipe de *Education and Public Outreach* do ESO



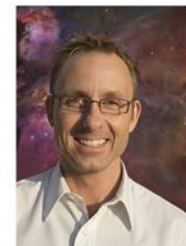
**Olivier Hainaut**  
Astronomer

## Astrônomo, verificar a ciência, imagens, coordenar a *ESO Science Outreach Network*

1. Science Liaison: scientific quality assurance
2. Astronomical image production coordination
3. **ESO Science Outreach Network** coordination

Olivier is an astronomer specialized in Solar System observations, with a special love for comets; he worked for many years at La Silla and Paranal, and before that on Mauna Kea.

1. Management and coordination of ESO's EPO efforts
2. Setting the strategic goals for the EPO work
3. Implementation of the EPO Strategy and optimising its return-on-investment

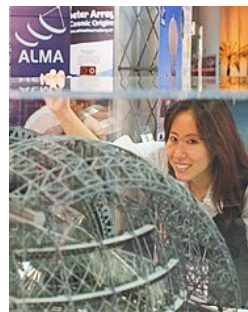


**Richard Hook**  
Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**  
Web & Advanced Projects Coordinator



**Raquel Yumi Shida**  
Web Content Coordinator





# Equipe de *Education and Public Outreach* do ESO

## Assistente de PIO

### Objectives

#### 1. Public Information Office assistance



**Mathias Jäger**

Intern Science Communication

Mathias was born in the beautiful Austrian city of Bad Ischl. He studied Astronomy in Vienna (first BSc, then MsC) and finished his studies with a master thesis on the analysis of dwarf galaxies in Hickson compact groups of galaxies. From 2009 to 2013 he wrote his PhD at the Max Planck Institute for Astronomy in Heidelberg, Germany. Staying in the field of extragalactic he was reducing and analyzing the data of the COMBO-17+4 catalogue – an optical and near/infrared deep sky survey. Using this survey he studied the evolution of galaxies since redshift of about 2.

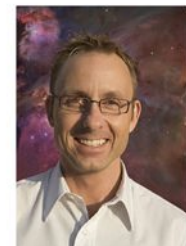
Already during his studies in Vienna and later in Heidelberg he was involved in different public outreach projects (talks, tours, open days, long nights of science, girl's days, etc.), so after successfully defending his thesis he started to work at the House of Astronomy – also located in Heidelberg – to reorganize the guided tours there and to recreate the planetarium show. This engagement in public outreach finally brought him to ESO.

#### Education and Public Outreach

Mathias Jäger

Communication specialist heading ESO-Hubble outreach group in Munich, responsible for public outreach and education for VLT, La Silla, ALMA, ELT, and the Space Telescope.

Responsible for the coordination of ESO's EPO efforts and for the strategic goals for the EPO work and for the implementation of the EPO Strategy and optimising its return-on-investment



**Richard Hook**

Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator





# Equipe de *Education and Public Outreach* do ESO



## Assistente de PIO

### Objectives

1. Public Information Office assistance

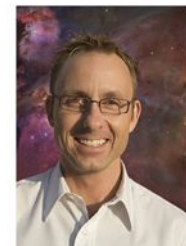
Head of education and Public Outreach

### Victoria Weller von Ahlefeld

Intern Science Communication

Victoria obtained her Bachelor of Science with Honours in Astrophysics at the University of Edinburgh in Scotland this year. Now she is looking to aid public understanding of the current topics in astronomy as a science communication intern at the ESO.

LT, and



**Richard Hook**

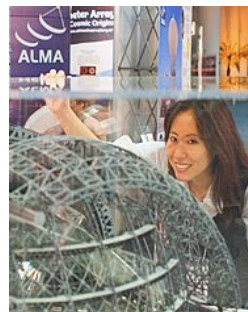
Public Information Officer / Image Processing

**Susana Almagro Garcia**  
Administrative Assistant



**Mathias Andre**

Web & Advanced Projects Coordinator



**Raquel Yumi Shida**

Web Content Coordinator





**Valentina Rodriguez**

Chile Education & Outreach

## Coordena com a mídia no Chile, tradução de press releases, anfitriã de visitas


### Objectives

1. Chile press coordination
2. Translation and distribution of press releases
3. Host for VIP and media visits

#### Head of education and Public Outreach

##### Lars Lindberg Christensen

Head of ePOD

 Lars is a science communication specialist heading ESO-Hubble outreach group in Munich, Germany, where he is responsible for public outreach and education for VLT, La Silla, ALMA, ELT, and ESA's part of the Hubble Space Telescope.

Email: [lars@eso.org](mailto:lars@eso.org)

Tel: +49 89 3200 6761

##### Objectives

1. Management and coordination of ESO's EPO efforts
2. Setting the strategic goals for the EPO work
3. Implementation of the EPO Strategy and optimising its return-on-investment





## Outras 4 pessoas trabalhando na EPO/ESO Chile

### Francisco Rodriguez

Chile Press Officer

Francisco is the Press Officer of ESO in Chile. After graduating from Diego Portales University in 2006, he worked for six years in print media, first for the Chilean magazine *Qué Pasa* and later for the newspaper *La Tercera*, one of the most important newspapers in the country. There, he wrote about science, technology, education and health. He also had the opportunity to attend various international conferences for science journalists in South America and the United States where he specialized in issues such as epidemics, new technologies and environmental problems.

### Laura Ventura

Chile Education & Outreach

Graduated in Astronomy, she has been mainly dedicated to public outreach and education, first at the IAC (Institute for Astrophysics of the Canary Islands), Spain and then at ESO Chile, since June 2006.

Objectives

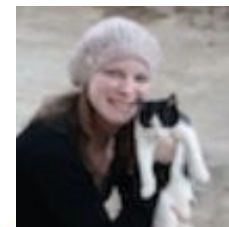
1. EPO content production (captions etc.)
2. Host for VIP and media visits
3. Promotion of relations with national and local communities



### Amy Tyndall

Volunteer ePOD/Chile

Amy Tyndall is originally from Liverpool (UK), where she gained her first-class MPhys degree in Astrophysics in 2008. After a year in the real world, she subsequently started her PhD at the Jodrell Bank Centre for Astrophysics at the University of Manchester in October 2009, studying planetary nebulae possessing binary central stars. Amy was then based on La Palma in the Canary Isles between September 2010--September 2011 as a Student Support Astronomer for the Isaac Newton Telescope, and followed it up with a studentship at ESO-Chile between February 2012--July 2013. Here, she became actively involved with the volunteer outreach group, and has helped create and maintain an unofficial blog about ESO's public activities both in English and in Spanish (see <http://starsailors.wordpress.com/> and <http://losmarineros.wordpress.com/>). After gaining her title of Doctor in March 2014, she began a 6-month placement working with ePOD back in ESO-Chile.



### Mylène Andre

Intern ePOD Chile

Objectives

1. Public Information Officer assistance



# ESO Science Outreach Network



European  
Southern  
Observatory

ESO — Reaching New Heights in Astronomy

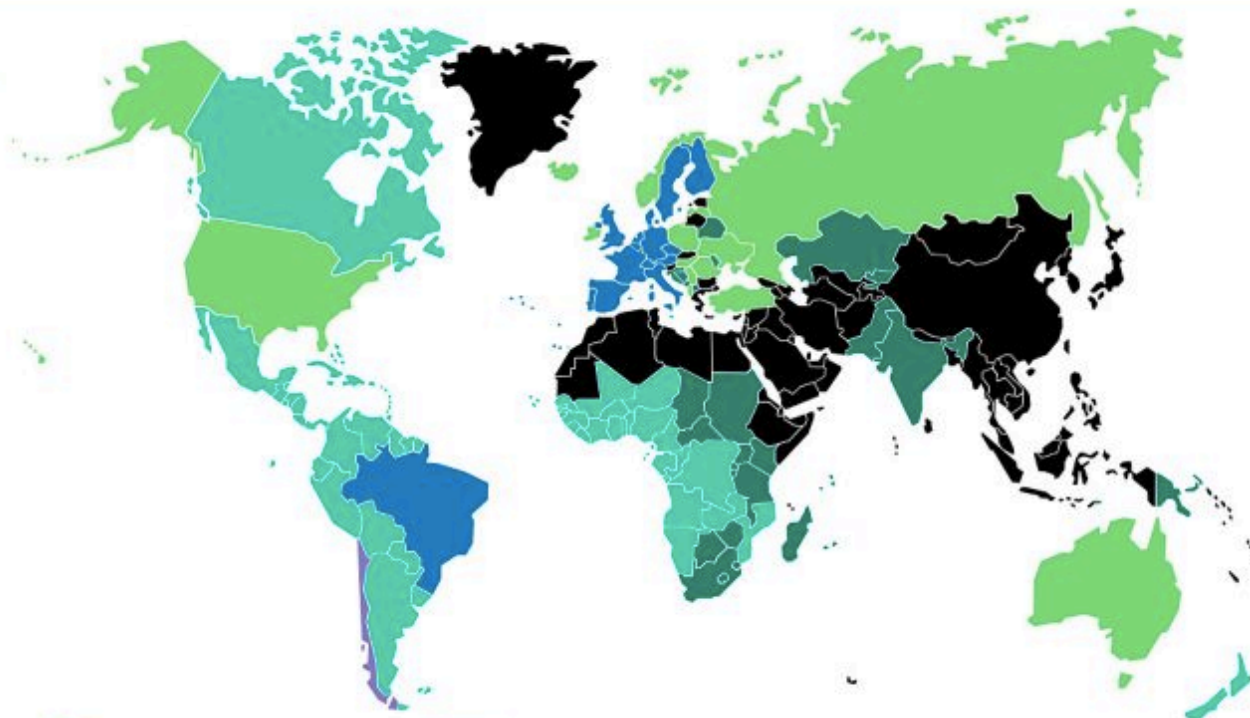


## ESO Science Outreach Network

The **ESO education and Public Outreach Department** has established a network of contacts in the ESO **Member states** and other countries. The goal of this ESO Science Outreach Network (ESON) is to act locally as ESO's media and outreach representative, in order to promote ESO's mission and achievements, and demonstrate the many inspirational aspects of astronomy. The ESON contacts can also serve as interface between the local scientists and the media. The communication between the member states (at the official and scientific levels) and ESO, takes place through **ESO's governing bodies**, and not through ESON, which deals only with outreach matters.

The ESON members are science communicators who know the national media and stake-holders, and regularly interact with them. They have a strong interest in promoting ESO, and provide regular inputs and ideas for how to best reach the target groups in their area. The ESON nodes are also in charge of translating the ESO material in their national language.

Below is the list of ESON members. If your country is not represented, and if you or your organization would be interested in acting as ESO's local outreach contact, contact us at [information@eso.org](mailto:information@eso.org).



- Blue square: ESO member states
- Purple square: ESO host
- Light Green square: Additional ESON members
- Medium Green square: Official languages fully supported
- Dark Green square: Official languages partly supported
- Black square: Official languages not supported

## ESON Countries

Member States:



# ESO Science Outreach Network: Brasil



European  
Southern  
Observatory

ESO — Reaching New Heights in Astronomy



## Brazil

ESO mini-site: <http://www.eso.org/public/brazil/>

### Dr Gustavo Rojas

Núcleo de Formação de Professores — Universidade Federal de São Carlos

Rod. Washington Luiz km 235

São Carlos - SP

13565-905

Brasil

Tel: +55 16 3351 9795

E-mail: [eson-brazil@eso.org](mailto:eson-brazil@eso.org)

Gustavo began his astronomy activities while he was a physics undergraduate at the University of São Paulo (USP). He then undertook postgraduate studies at USP, investigating young, low-mass stars, their chemical abundances and circumstellar environments. Since 2008 he has been a full-time astronomer at the Federal University of São Carlos (UFSCar), located 240 km northwest of São Paulo. He is in charge of a small observatory and works mainly on educational and outreach activities. Among the projects he is currently working on are the videocast, O Céu da Semana (The Weekly Sky) and the radio show Paideia. Both are produced in collaboration with the Open Laboratory for Interactivity (LAbI) at UFSCar. He is also an editor of the Latin American Journal of Astronomy Education (RELEA) and one of the Brazilian representatives in Galileo Teacher Training Program. His main interests in addition to astronomy are travelling, reading, photography and music.

Read Gustavo's [blog](#).

Gustavo on [Twitter](#) and [YouTube](#).





# Sugestão de Education & Public Outreach (EPO) Office para a USP

- Journalists: OK, existe em boa parte dos institutos
- Já existe boa parte de pessoas trabalhando em eventos, educação e web nos institutos da USP
- **Precisamos urgentemente de uma equipe na USP para apoio em:**
  - **animações e ilustrações; começar com 2 pessoas**
  - **“editor e proof reader”**: revisa e edita os textos
  - **“press officer”**: **contatos com a mídia (e apoio para coletivas de imprensa?)**