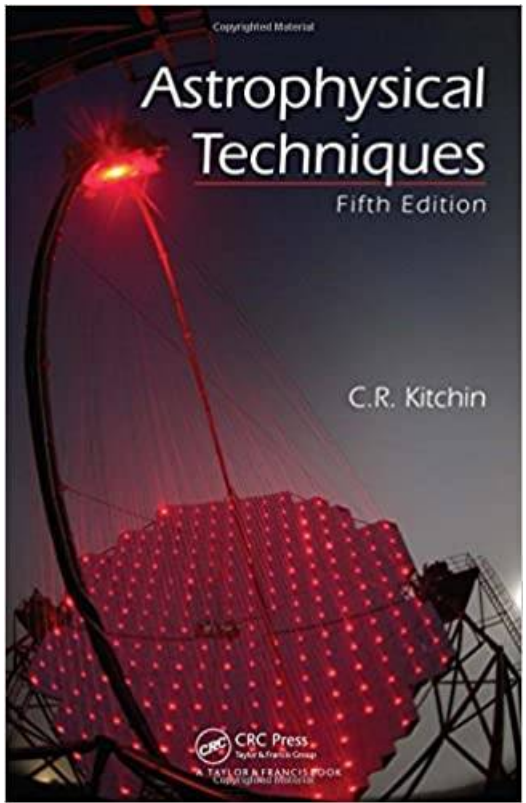
Seminar

Astrophysical Techniques, by Kitchin.
Any of the last 3 editions (5th [2008], 6th [2013], 7th[2020]) is fine.

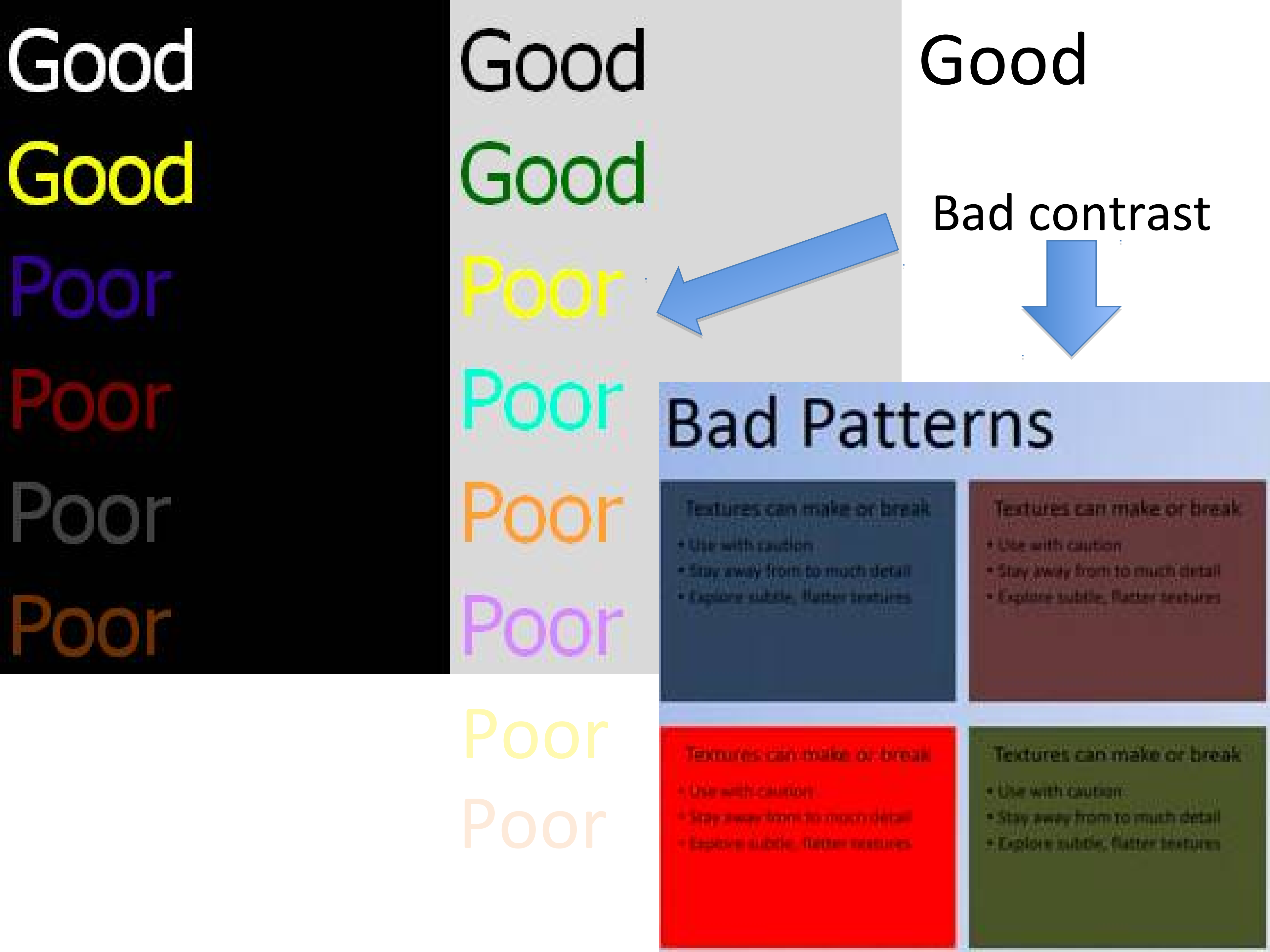
This is the basic material, but you should also enrich your talk using complementary material. For example, for x-ray telescopes, search for the latest x-ray facilities.



Tips: **Fonts**. If large → any font is OK

- Não use fontes pequenas demais Try to use font sizes ≥ 30
- Try to avoid serif fonts (e.g., Times New Roman)
- Prefer Sans serif (e.g.: Calibri, Arial, Helvetica)

• Use cores que contrastem com o fundo	X
• Use cores que contrastem com o fundo	X
• Use cores que contrastem com o fundo	X
• Use cores que contrastem com o fundo	✓
• Use cores que contrastem com o fundo	✓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Textures can make or break
• Use with caution
• Stay away from to much detail
• Explore subtle, flatter textures
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• Explore subtle, flatter textures

Avoid the lowest part (~10%) of the slide

- Depending on the room or auditorium, some people may not be able to see the lowest part of the slide.
- It is fine to use it to include less relevant information, such as links, citations, etc.
- For pictures, it is fine to use 100% of the slide

Avoid including more than 1 plot per slide

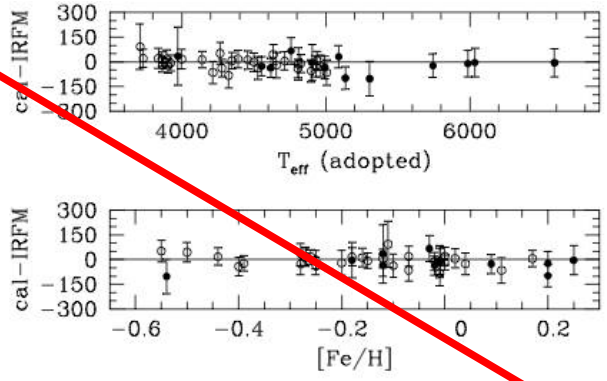


FIG. 5.—Difference between the temperatures from the color calibrations and the IRFM temperatures as a function of the adopted temperatures and metallicities of dwarfs (*filled circles*) and giants (*open circles*).

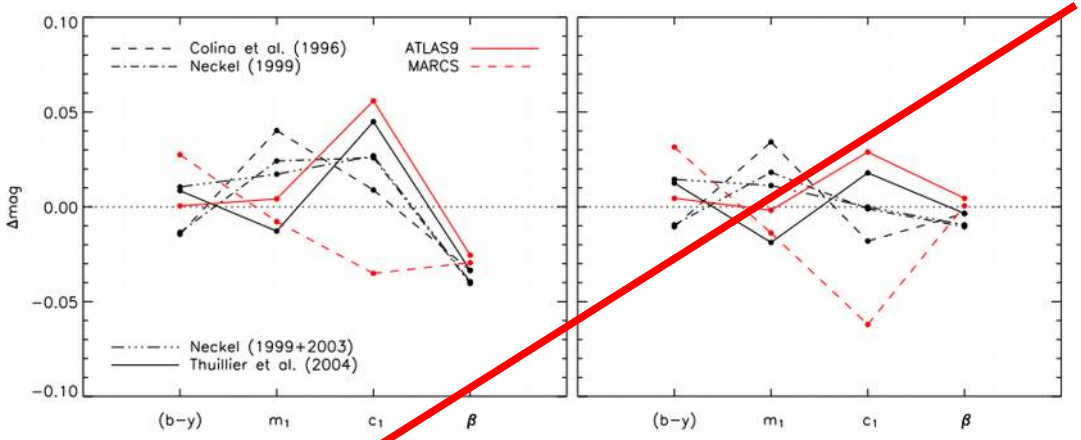


Fig. 5. Comparison between solar and synthetic colors obtained from different spectra. *Left panel*: using Vega STIS observations to set the zero-points. *Right panel*: using ATLAS9 Vega model for the same purpose. Δmag = our derived solar colors minus the synthetic ones.

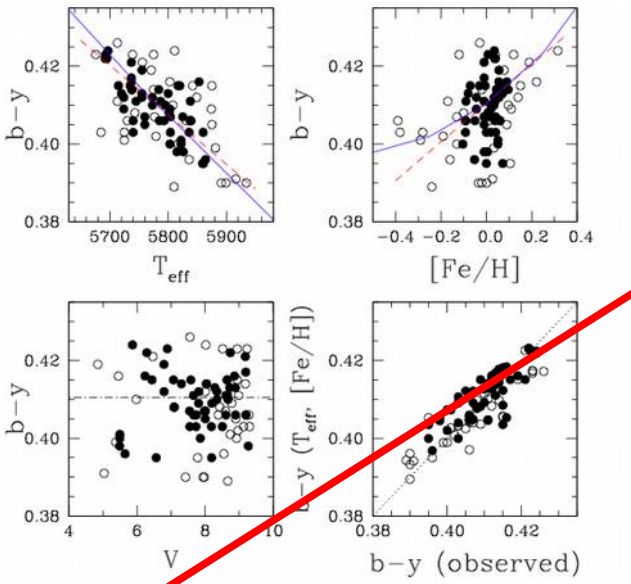


Fig. 1. (b–y) vs. $T_{\rm eff}$ (*upper left panel*), [Fe/H] (*upper right panel*), and V magnitude (*lower left panel*, with a dot-dashed line at $(b-y)_\odot$). The results of the global fit vs. the observed $(b-y)$ color is presented in *the lower right panel*, with the dotted line indicating equality. Solar twins and solar analogs are represented by filled and open circles, respectively. The dependences of the fit on $T_{\rm eff}$ and [Fe/H] are shown by dashed lines, while the relative predictions of MARCS models (normalized to our inferred solar colors) are shown by solid lines.

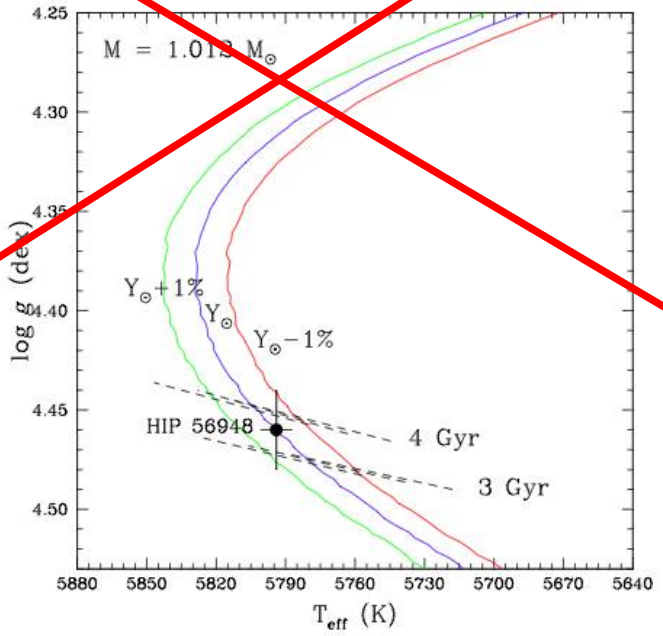


Fig. D.1. Solar metallicity evolutionary tracks for 1.012 $M_\odot$ (solid lines) at three different He abundances: solar and ±1% solar. Isochrones at 3 and 4 Gyr are plotted with dashed lines. The position of HIP 56948 and error bars in $T_{\rm eff}$ and $\log g$ are also shown.

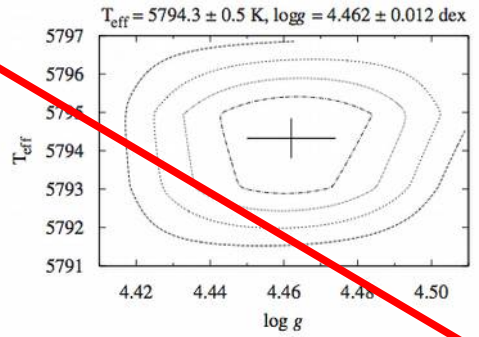
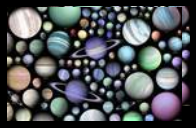


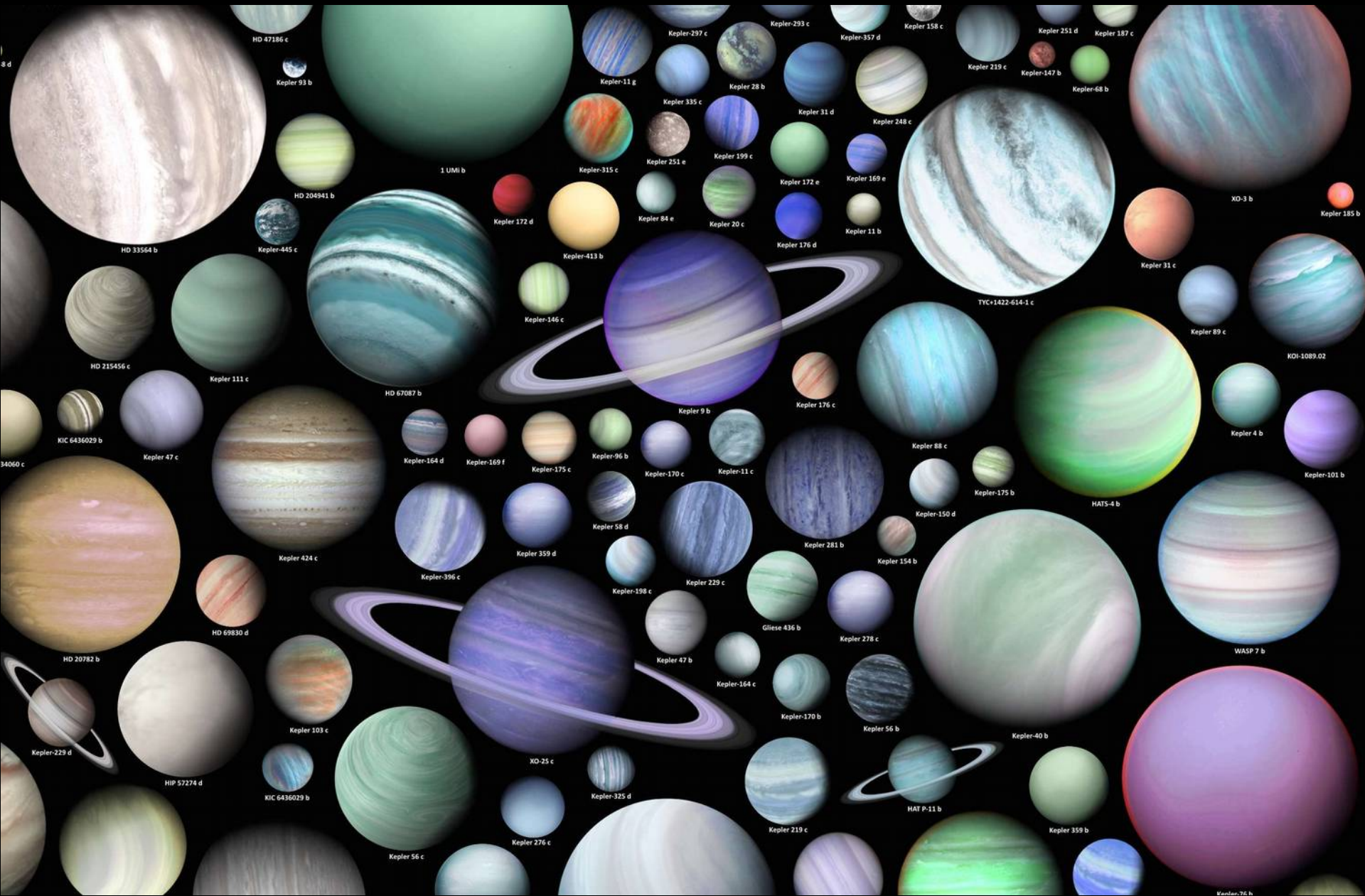
Fig. C.4. Contour plot of the parameter TG (Eq. (C.1)), which evaluates how good the differential spectroscopic equilibrium is. The minimum is shown by a cross at $T_{\rm eff} = 5794.3 \pm 0.5$ K and $\log g = 4.462 \pm 0.012$ dex, which is in excellent agreement with our adopted solution. The contour levels increase in steps of $\Delta TG = 0.1$ from the minimum.

Try to use most of the space available

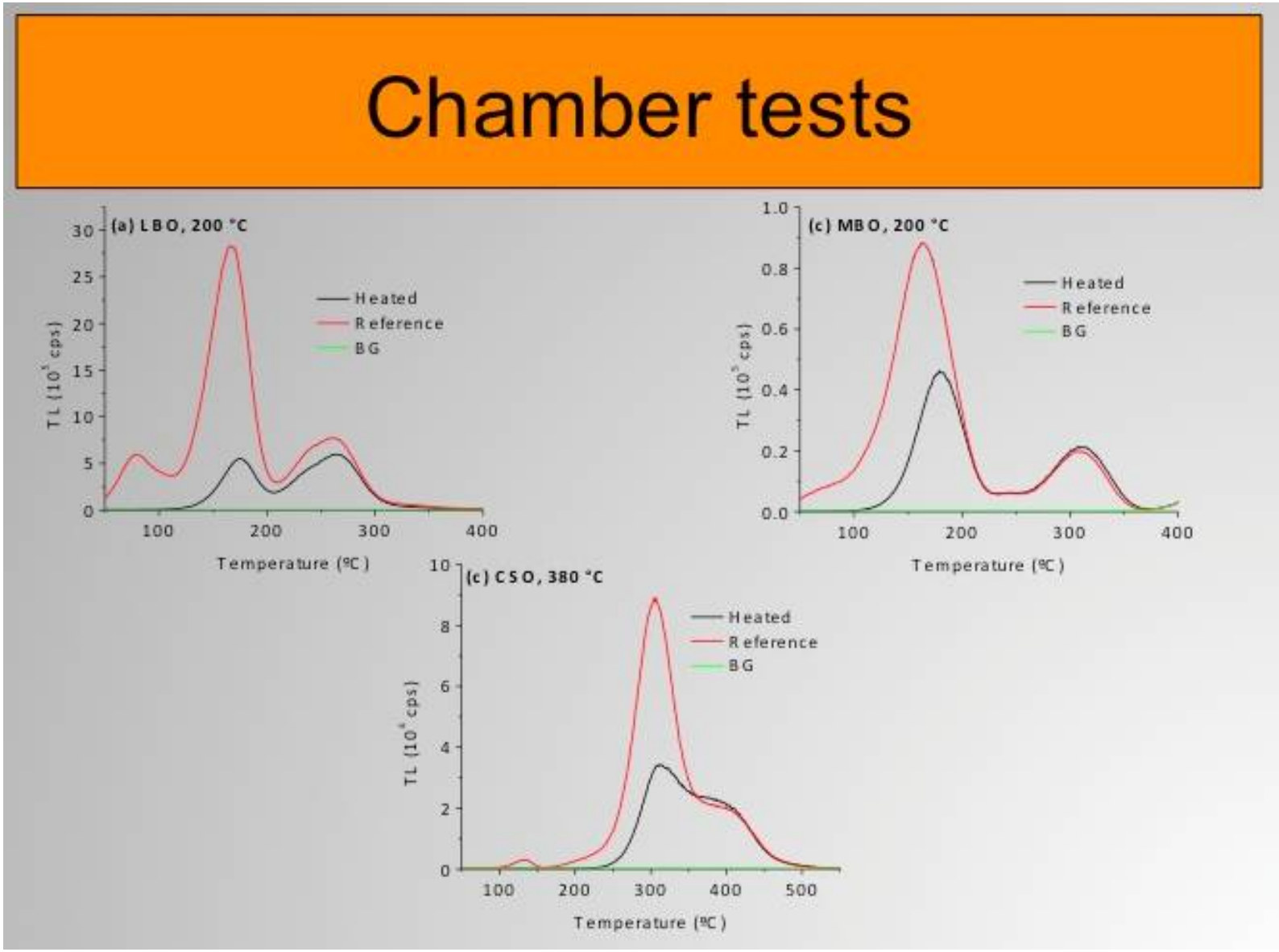
Avoid putting very small figures



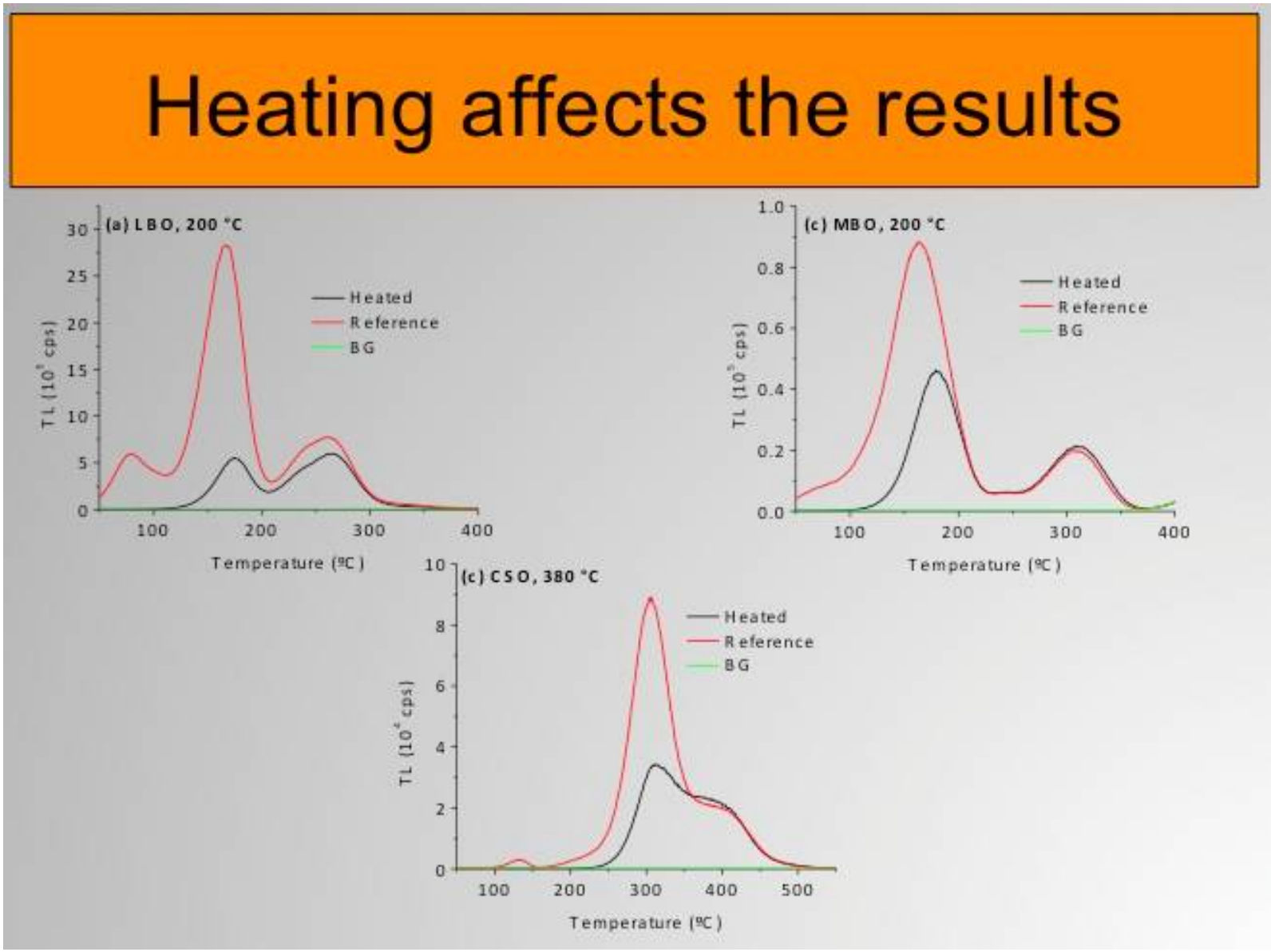
Try to use all available space



Why is the message of the slide?



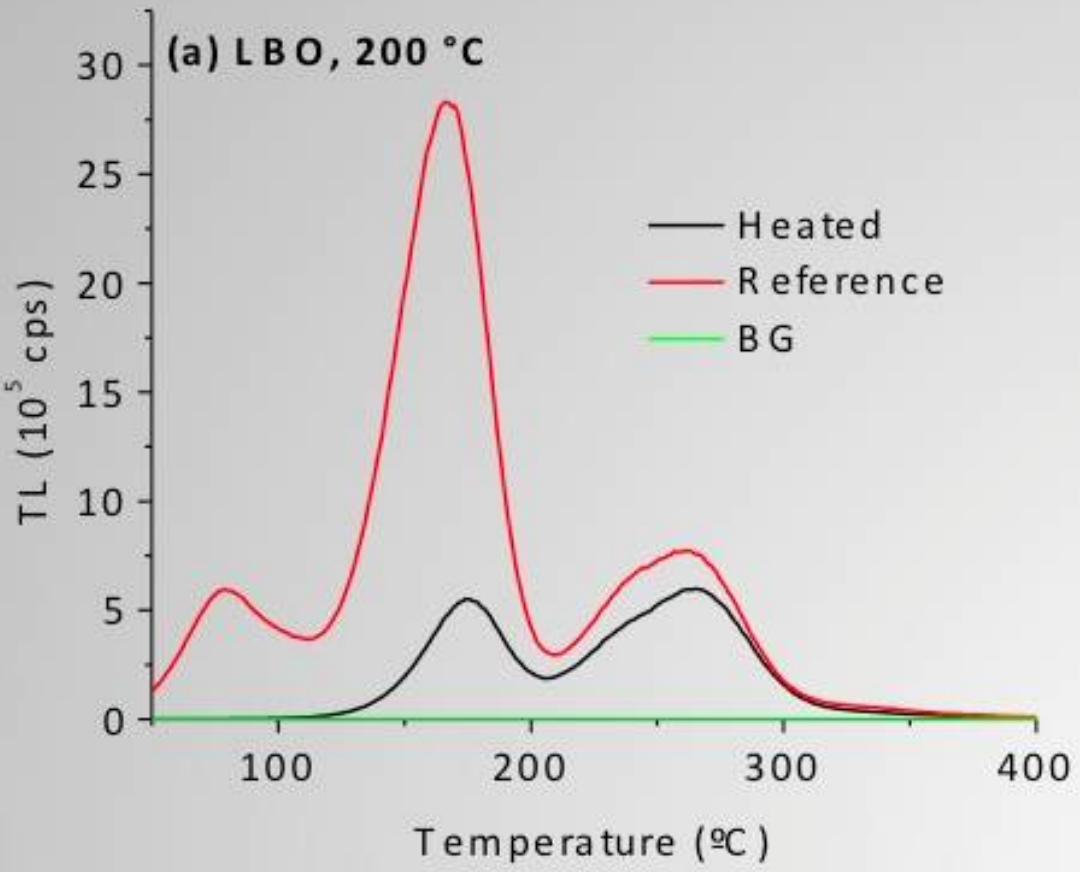
Better:



http://cienciapratica.wordpress.com/2013/08/29/dicas-para-melhorar-a-palestra/

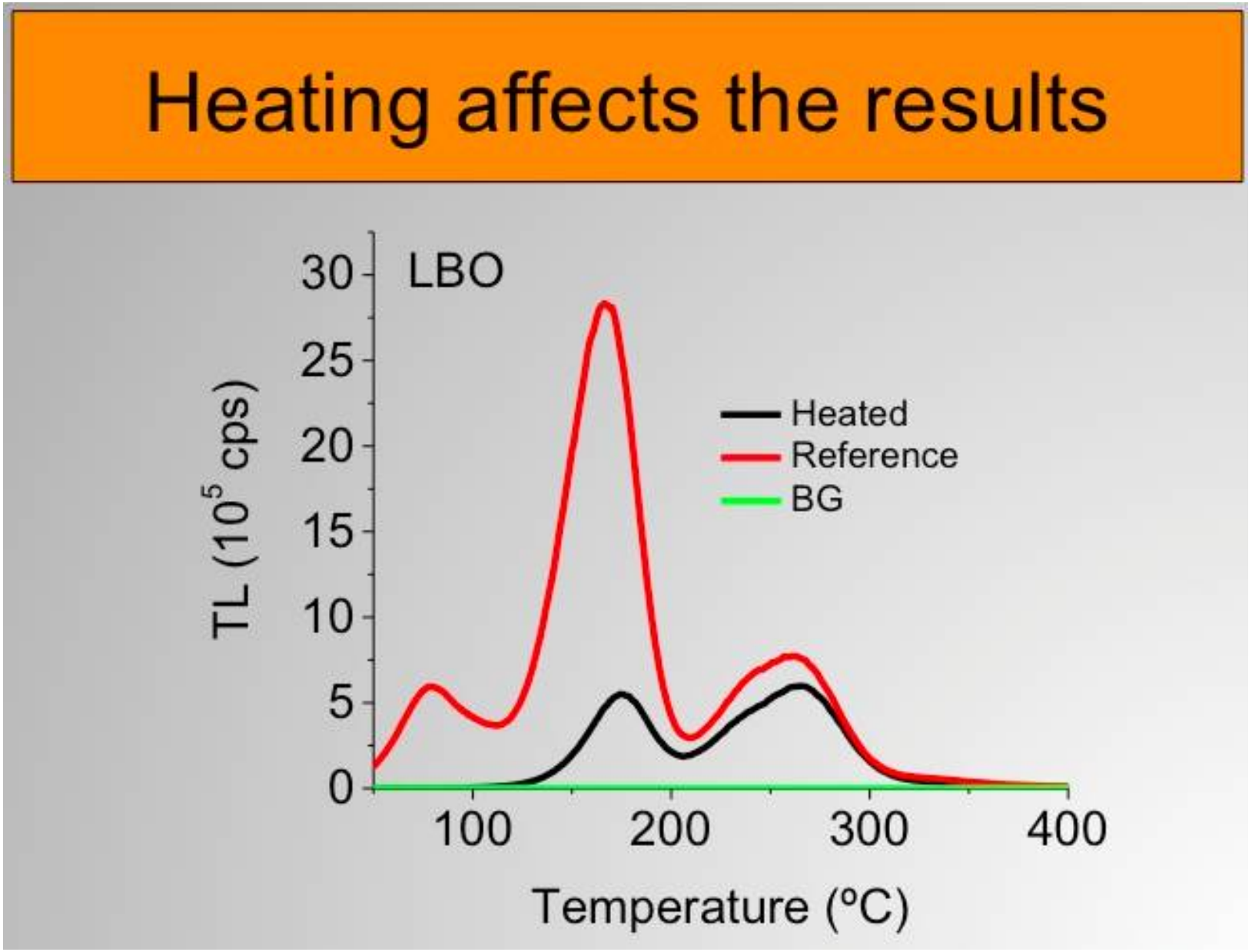
Even better:

Heating affects the results



http://cienciapratica.wordpress.com/2013/08/29/dicas-para-melhorar-a-palestra/

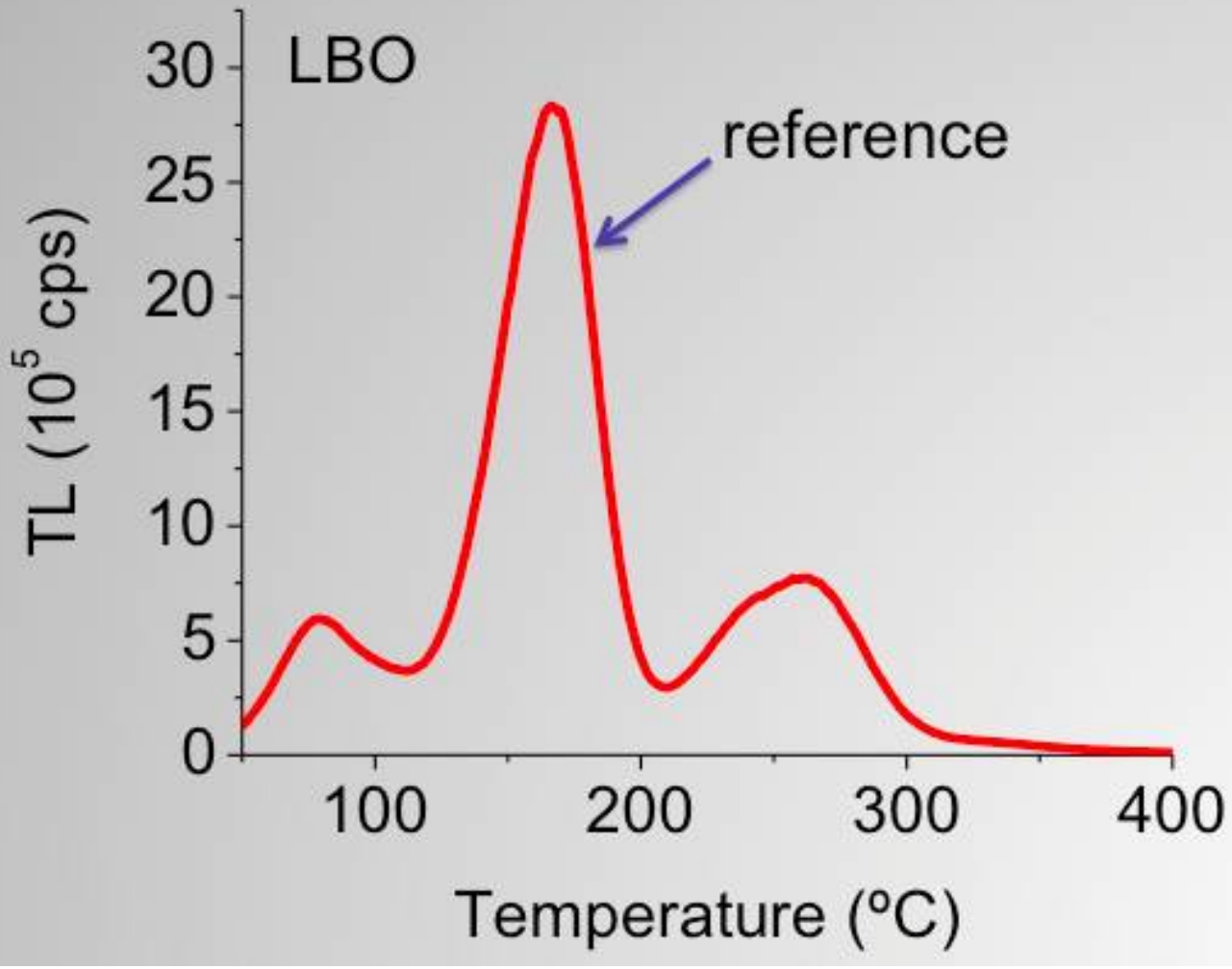
Much better!



How can we improve:

- Present one curve at a time, explaining each curve in each slide, as shown in the next slides
- Save money, don’t save slides!

Heating affects the results



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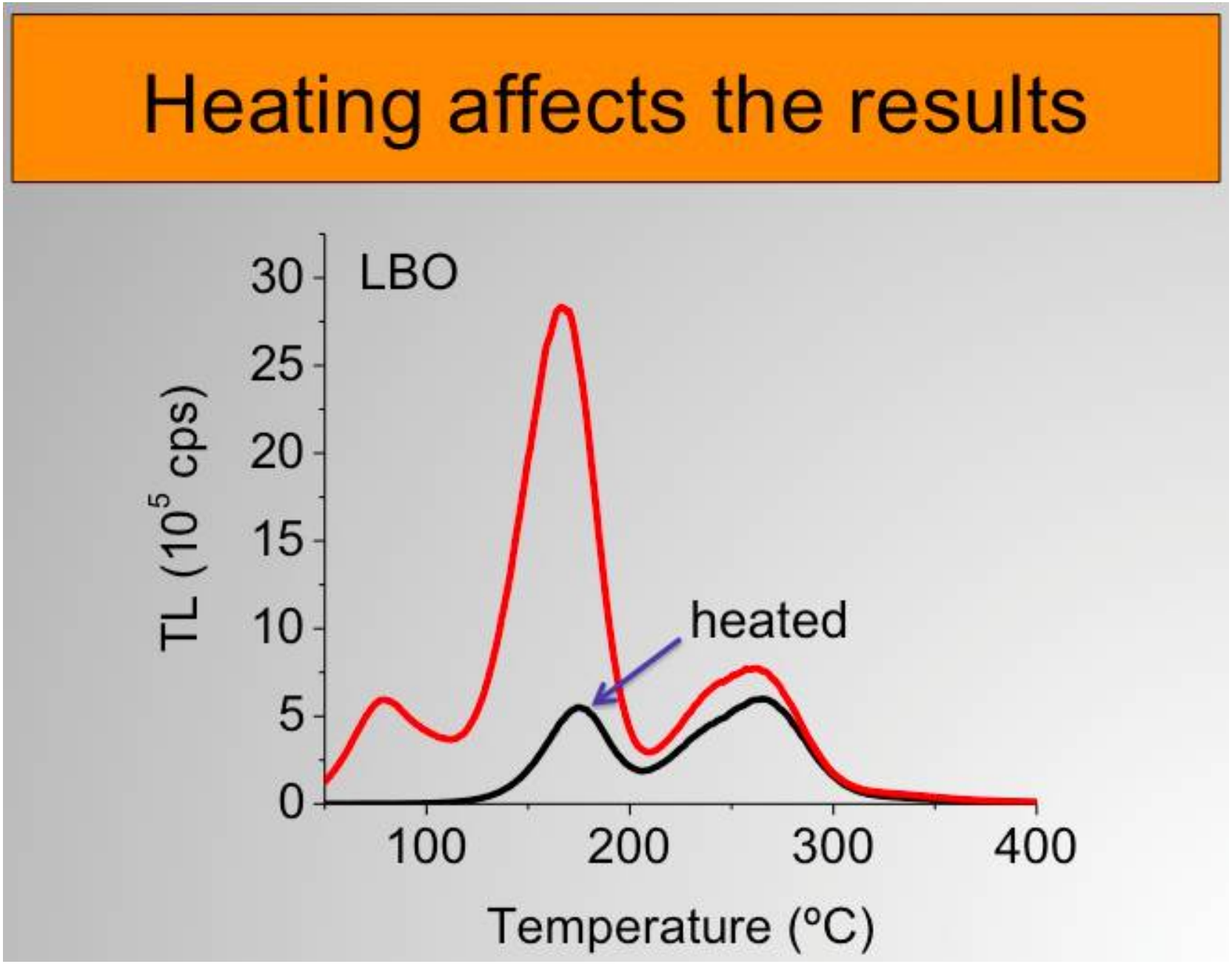

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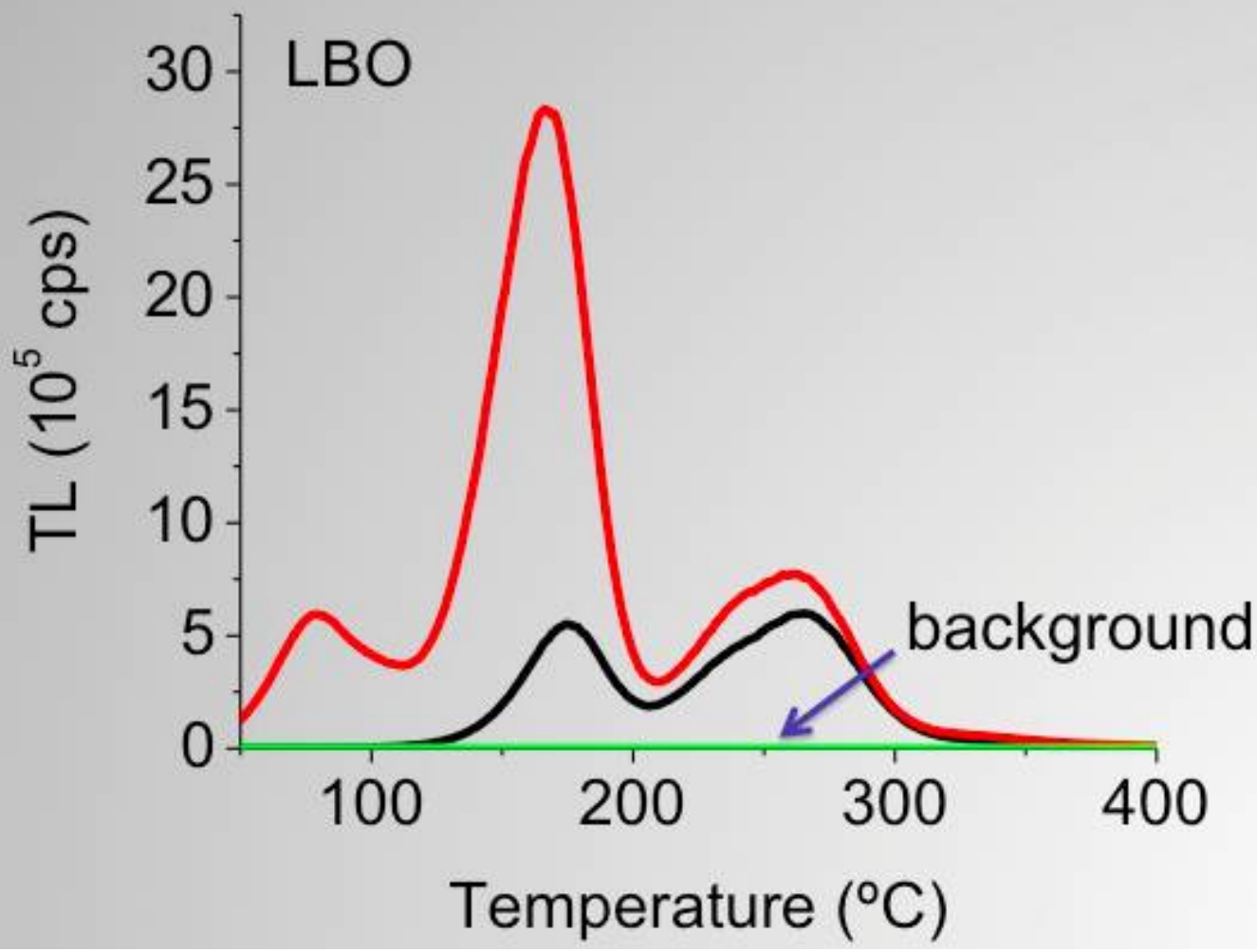

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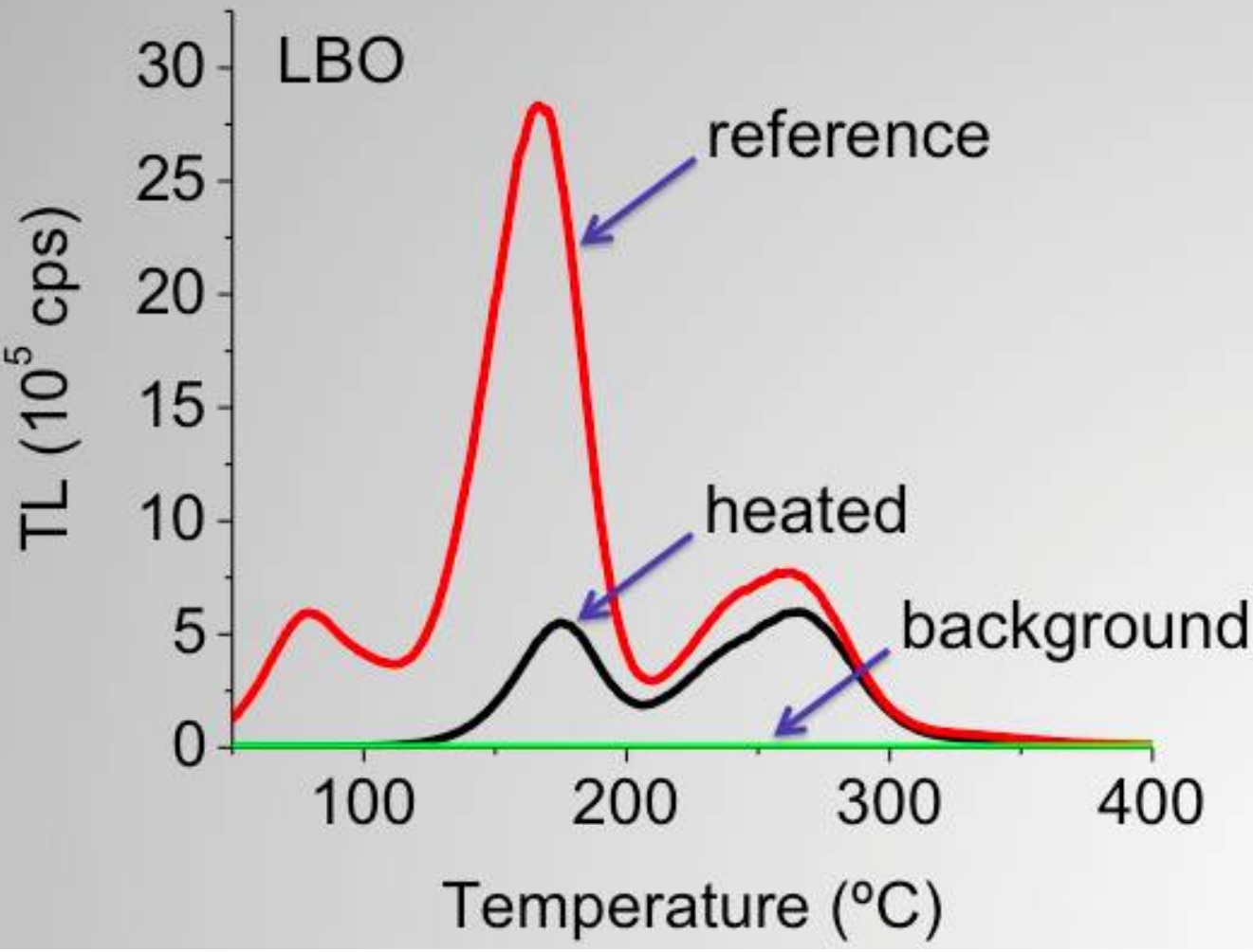

Talvez usar fundo branco (ao invés de cinza), para melhorar o contraste

http://cienciapratica.wordpress.com/2013/08/29/dicas-para-melhorar-a-palestra/

Seminar

9 to 14 min: no discount in points

I'll discount 2 points per minute below 9 min or above 14 min. For example, if you do it in 16 min, then you'll have a discount of 4 points.

Astrophysical Techniques, by Kitchin.
Any of the last 3 editions (5^{th}, 6^{th}, 7^{th}) is fine. Depending on the topic, older versions (1^{st} to 4^{th}) may be OK.

This is the basic material. You should try to enrich your talk using complementary material

May 11, 14:00 1. Detectors: 1.1.1 (Intro) to 1.1.7 (Cryostats): Claikson

14:20 2. Detectors: 1.1.8 (CCDs): Danilo

14:40 3. Detectors: 1.1.9 (Photography) to 1.1.11 (STJ Detectors): Eduardo

15:00 4. Detectors: 1.1.12 - 1.1.14 (Other type of detectors + IR + UV): Elis

15:20 5. Radioastronomy: 1.2: Gabriela

15:40 6. Cosmic Ray Detectors: 1.4: Giulia E. Silva

May 16, 14:00 7. Neutrino Detectors: 1.5: Giulia Martos

14:20 8. X-ray and Gamma-rays (1.3.1 – 1.3.3): Giulya Santos

14:40 9. X-ray and Gamma-rays (1.3.4 – 1.3.8): Luana

15:00 10. Gravitational Waves: 1.6: Lais

15:20 11. Electronic imaging & Scanning (2.3 to 2.4): Leonardo

15:40 12. Interferometry (2.5): João

May 18, 14:00 13. Speckle interferometry (2.6) and Occultations (2.7): Matheus

14:20 14. Radar (2.8): Nicolas

14:40 15. Astrometry and Gaia (5.1): Morgan

15:00 16. Polarimetry (5.2): Pamela

15:20 17. Solar Studies (5.3): Raquel

15:40 18. Magnetometry (5.4): Yasmmin

Grades (0 to 10), based on:

- Bad timing (discount < 9 min or > 14 min)
- -1 point for each slide with small text, figure or table, or bad contrast (e.g. white background & text in yellow)
- Use the book AND complementary material
- Bad didactic (just reading the slides) or no balance between details & key points) → lower grade
- How well are answered the questions
- Each student must ask 1 question and handle the written question to me (otherwise: -2 points)