

# X-ray Spectral Fitting 2022



**Astronomical  
Institute**  
of the Czech Academy  
of Sciences

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*Note all times are in Central European Time and the hands-on exercises are available at:  
[peterboorman.com/tutorial\\_bxa](http://peterboorman.com/tutorial_bxa)*

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*Monday 7th February 2022*

*– Day 1, X-ray spectral fitting introduction –*

9:00 – 9:30 – *Coffee, help & questions* (optional)

9:30 – 9:45 – *Welcome*  
– Presenter: **Peter Boorman**

9:45 – 11:00 – Hands-on: *Introduction to Xspec/PyXspec*

11:00 – 12:00 – Hands-on: *Introduction to Sherpa*

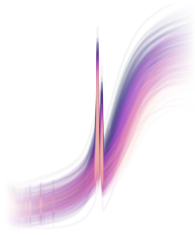
12:00 – 14:00 – *Lunch*

14:00 – 15:00 – Plenary lecture: *The Past, Present & Future of X-ray Spectral Analysis*  
– Presenter: **Dr. Keith Arnaud**

15:00 – 15:30 – *Coffee break*

16:00 – 17:00 – Plenary lecture: *The Importance & Power of X-ray Spectral Fitting*  
– Presenter: **Prof. Richard Mushotzky**

*– End of day 1 –*



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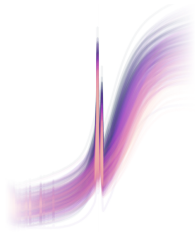
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*Tuesday 8th February 2022*

*– Day 2, BXA introduction –*

- 9:00 – 9:30 – *Coffee, help & questions* (optional)
- 9:30 – 11:00 – Hands on: *Xspec & Sherpa exercises*
- 11:00 – 12:00 – Plenary lecture: *Introductory talk for Bayesian X-ray Analysis*  
– Presenter: **Dr. Johannes Buchner**
- 12:00 – 14:00 – *Lunch*
- 14:00 – 14:30 – Invited talk: *TBD*  
– Presenter: **Dr. Teng Liu**
- 14:30 – 15:00 – Invited talk: *XMMFITCAT-Z: Using photo-z information within BXA*  
– Presenter: **Dr. Angel Ruiz**
- 15:00 – 15:30 – *Coffee break*
- 15:30 – 17:00 – Hands-on: *BXA exercises, session 1: spectral fitting & model comparison*

*– End of day 2 –*



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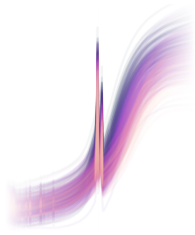
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*Wednesday 9th February 2022*

*– Day 3, BXA hands-on session 1 –*

- 9:00 – 9:30    – *Coffee, help & questions* (optional)
- 9:30 – 12:00    – Hands-on: *BXA exercises, session 1: spectral fitting & model comparison*
- 12:00 – 14:00    – *Lunch*
- 14:00 – 14:30    – Invited talk: *A BXA-driven study of reliability of X-ray Spectral fits in determining AGN torus morphology*  
– Presenter: Tathagata Saha
- 14:30 – 15:00    – Invited talk: *Using BXA to derive redshifts*  
– Presenter: Charlotte Simmonds
- 15:00 – 15:30    – *Coffee break*
- 15:30 – 17:00    – Hands-on: *BXA exercises, session 1: spectral fitting & model comparison*
- 19:00 – 22:00    – *Winter school meal*

*– End of day 3 –*



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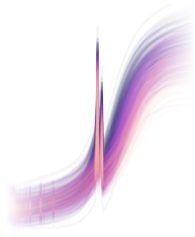
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*Thursday 10th February 2022*

*– Day 4, BXA more advanced concepts –*

- 9:00 – 9:30    – *Coffee, help & questions* (optional)
  
- 9:30 – 10:30    – Lecture: *More computationally-expensive analyses with BXA*  
                    – Presenter: **Peter Boorman**
  
- 10:30 – 12:00    – Hands-on: *BXA exercises, session 2: more advanced concepts*
  
- 12:00 – 14:00    – *Lunch*
  
- 14:00 – 14:30    – Invited talk: *Complex modelling with many datasets within BXA*  
                    – Presenter: **Devang Liya**
  
- 14:30 – 15:00    – Invited talk: *Exploring the obscuration properties of AGN in the  
                    Chandra Deep Wide Field Survey with BXA*  
                    – Presenter: **Dr. Alberto Masini**
  
- 15:00 – 15:30    – *Coffee break*
  
- 15:30 – 17:00    – Hands-on: *BXA exercises, session 2: more advanced concepts*

*– End of day 4 –*



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*Friday 11th February 2022*

*– Day 5, questions & continued more advanced concepts –*

9:00 – 9:30    – *Coffee, help & questions* (optional)

9:30 – 12:00    – Hands-on: *BXA exercises, session 2: more advanced concepts*

12:00 – 14:00    – *Lunch*

14:00 – 14:30    – Invited talk: *Bayesian spectral analysis for large XMM surveys*  
– Presenter: **Lingsong Ge**

14:30 – 15:00    – Invited talk: *The synergy between Monte Carlo Radiative Transfer  
and Artificial Neural Networks*  
– Presenter: **Dr. Gabriele Matzeu**

15:00 – 15:30    – *Coffee break*

15:30 – 16:30    – Hands-on: *BXA exercises, session 2: more advanced concepts*

16:30 – 17:00    – *Questions & closing remarks*

*– End of day 5 –*