

# X-ray Spectral Fitting



Prague | February 2022

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All times are in Central European Time and hands-on sessions are in-person only.  
XSF hands-on: [peterboorman.com/tutorial\\_bxa](http://peterboorman.com/tutorial_bxa)

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*Monday 7th February 2022*

{ *Day 1, X-ray spectral fitting introduction* {  
(Talk chair: Jiri Svoboda)

9:00 { 9:30 { *In-person registration & coffee break*

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: **Keith Arnaud**

15:00 { 15:30 { *Coffee break*

15:30 { 16:00 { *Winter school photo*

16:00 { 17:00 { Plenary lecture: *High Energy Astrophysics Spectroscopy*  
{ Presenter: **Richard Mushotzky**

{ *End of day 1* {

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Tuesday 8th February 2022

{ *Day 2, BXA introduction* {  
(Talk chair: Daniel Kynoch)

- 9:00 { 9:30 { *Coffee break*
- 9:30 { 11:00 { Hands on: *Xspec & Sherpa exercises*
- 11:00 { 12:00 { Plenary lecture: *Introductory talk for Bayesian X-ray Analysis*  
{ Presenter: Johannes Buchner
- 12:00 { 14:00 { *Lunch*
- 14:00 { 14:30 { Invited talk: *X-ray spectral analysis in eROSITA Final  
Equatorial Depth Survey (eFEDS): an example of using BXA*  
{ Presenter: Teng Liu
- 14:30 { 15:00 { Invited talk: *XMMFITCAT-Z: Using photo-z information within  
BXA*  
{ Presenter: Angel Ruiz
- 15:00 { 15:30 { *Coffee break*
- 15:30 { 16:30 { Hands-on: *BXA exercises, session 1: spectral fitting & model  
comparison*
- 16:30 { 17:00 { *Questions & discussion*

{ *End of day 2* {

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Wednesday 9th February 2022

{ *Day 3, BXA introduction* {  
(Talk chair: Peter Boorman)

- 9:00 { 9:30 { *Coffee break*
- 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: *Deriving redshifts from X-ray spectra of obscured AGN using BXA*  
{ Presenter: Charlotte Simmonds
- 15:00 { 15:30 { *Coffee break*
- 15:30 { 16:30 { Hands-on: *BXA exercises, session 1: spectral fitting & model comparison*
- 16:30 { 17:00 { *Questions & discussion*
- 19:00 { *Virtual social evening*  
{ An opportunity for all participants to meet, greet and play online games.  
{ Organiser: **Abhijeet Borkar**

{ *End of day 3* {

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Thursday 10th February 2022

{ *Day 4, BXA more advanced concepts* {  
(Talk chair: Anastasia Yilmaz)

- 9:00 { 9:30 { *Coffee break*
- 9:30 { 10:00 { Hands-on: *BXA exercises, session 1: spectral fitting & model comparison*
- 10:00 { 11:00 { Hands-on: *BXA analyses part II*  
{ Presenters: Johannes Buchner & 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: Alberto Masini
- 15:00 { 15:30 { *Coffee break*
- 15:30 { 16:30 { Hands-on: *BXA exercises, session 2: more advanced concepts*
- 16:30 { 17:00 { *Questions & discussion*
- 19:00 { *Winter school meal*  
{ Venue: TBD

{ *End of day 4* {

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*Friday 11th February 2022*

{ *Day 5, BXA more advanced concepts* {  
(Talk chair: Peter Boorman)

9:00 { 9:30 { *Coffee break*

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: **Gabriele Matzeu**

15:00 { 15:30 { *Closing remarks*

15:30 { 17:00 { Hands-on (optional): *BXA exercises, session 2: more advanced  
concepts*

{ *End of winter school* {