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

Monday 7th February 2022

– Day 1, X-ray spectral fitting introduction –
(Talk chair: Jiří 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*** –

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: Jiří Svoboda*)

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	– ***Coffee break***
15:30 – 16:30	– Hands-on: ***BXA exercises, session 2: more advanced concepts***
16:30 – 17:00	– ***Closing remarks***

– End of winter school –