

**Agenda for the X-ray Surveyor Face-to-Face Meeting 25-26 July, 2016  
Harvard-Smithsonian Center for Astrophysics, Phillips Auditorium**

**Monday, July 25**

**8:55** Welcome remarks by the STDT co-chairs (Feryal Ozel and Alexey Vikhlinin)

**9:00-9:30** NASA HQ welcome and remarks on Decadal Studies Charter (Paul Hertz) **9:30-10:00**

NASA Headquarters remarks (Dan Evans, Mooni Ahmed)

**10:00-10:30** Decadal Lessons Learned (Keith Warfield)

**10:30-11:00** STDT discussion with Paul Hertz on Decadal strategies and approaches

**11:00-12:00** Discussion/Brainstorming Session on fulfilling the Triple Role of the STDT:  
Science, Technology, Community Advertising (Feryal Ozel and Alexey Vikhlinin)

**12:00-1:00 Lunch**

**1:00-2:30** Science and Technology Working Groups Breakout Session

**2:30-3:30** Presentations from WG Leaders I: 1, 2, 3, 4

2:30-2:45 Baryon Cycles in and out of Galaxies (J. Bregman, J. Kollmeier)

2:45-3:00 First Accretion Light (N. Brandt, P. Madau, D. Stern)

3:00-3:15 Evolution of Structure and AGN Populations (S. Allen, R. Hickox, T. Jeltema,  
D. Stern)

3:15-3:30 Physics of Plasmas (E. Quataert, A. Vikhlinin)

**3:30-4:00 Coffee**

**4:00-5:00** Presentations from SWG Leaders for 5, 6, 7, 8

4:00-4:15 Physics of High Density Matter, Compact Objects and Accretion (F. Paerels,  
F. Ozel, C. Reynolds)

4:15-4:30 Physics of Feedback (M. Donahue, C. Reynolds)

4:30-4:45 Stellar Lifecycles (L. Lopez, R. Osten, A. Ptak, D. Pooley)

4:45-5:00 X-Rays in the Multi-Wavelength, Multi-Messenger Era (R. Petre, R. Smith)

**Tuesday, July 26**

**9:00-10:30** X-ray Surveyor 2015 Concept Study at MSFC ACO (A. Schnell)

**10:30-11:00** Athena Science (P. Nandra, R. Smith)

**11:00-11:15** Past and Future: Chandra to Hitomi Lessons Learned (D. Schwartz)

**11:15-11:30** Chandra Lessons Learned – industry partnerships (J. Arenberg)

**11:30-12:00** Presentation from Optics WG Chair (M. Pivovarov)

**12:00-1:00 Lunch**

1:00-2:00 Science Working Groups Breakout Session  
2:00-2:30 Presentation from Instrument WG Chair (TBD)  
2:30-3:00 Path Forward: the Study Office (Schedule and Resources) – J. Gaskin

**3:00-3:30 Coffee**

3:30-4:00 Path Forward: for SWGs (F. Ozel, A. Vikhlinin)  
4:00-4:30 Planning future F2F meetings, XRS science conference, and next stages of the study (F. Ozel, J. Gaskin)

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**List of Science Working Groups**

**1. Baryon Cycles in and out of Galaxies:**

(includes: cosmic web, IGM, CGM, MW halo, evolution of normal galaxies) Joel Bregman, Juna Kollmeier

**2. First Accretion Light:**

(includes: BH seed formation, X-rays from early BHs, X-ray binaries in early galaxies) Niel Brandt, Piero Madau, Daniel Stern

**3. Evolution of Structure and AGN populations:**

(includes: statistical studies of AGN populations, galaxy evolution, clusters) Steve Allen, Ryan Hickox, Tesla Jeltema, Daniel Stern

**4. Physics of Plasmas:**

(includes: shocks, particle acceleration, interfaces, transport processes, turbulence, instabilities in numerous astrophysical systems)  
Eliot Quataert, Alexey Vikhlinin

**5. Physics of High Density Matter, Compact Objects, and Accretion:**

(includes: physics of cold dense matter, BH spacetimes, GR tests, TDEs, Short bursts) Frits Paerels, Feryal Ozel, Chris Reynolds

**6. Physics of Feedback:**

(includes: feedback on all scales from BHs to young stars to SNe to jets to galactic winds)  
Megan Donahue, Chris Reynolds

**7. Stellar Lifecycles:**

(includes: stars, X-ray binaries, supernovae, SN remnants) Laura Lopez, Rachel Osten, Andy Ptak, Dave Pooley

## **8. X-rays in the Multi-wavelength, Multi-Messenger Era:**

(Synergies with gravitational waves, WFIRST, LSST, etc.) Robert Petre, Randall Smith