# Contamination Working Group: Status & Plans

Herman L. Marshall May 16, 2024

## Goals and Status

- Goals
  - Update and compare contamination models
  - Generate a white paper on mitigation and analysis
- Updates
  - Chandra ACIS (A. Bogdan, H. Marshall)
    - contamination is still growing, model is good
  - Still mild/none on XMM instruments
  - (Still) none on eROSITA
  - XRISM Xtend: only limits to contamination!
- No progress on white paper

## White Paper Plan

- Develop on overleaf, link to edit was distributed
- Review progress monthly
- Target completion by next IACHEC Plenary
- Initiate as white paper, decide on journal later

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## Contamination on Detectors in X-ray Telescopes

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Submitted to A Very Good Journal

### ABSTRACT

We describe efforts to avoid or eliminate the buildup of molecular contamination on the sensors of X-ray astronomy telescopes. In cases where contamination has been found, we provide an overview of the nature of the contaminant and the methods of characterizing and monitoring the buildup.

Keywords: Astronomical methods, X-ray astronomy, Calibration

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File outline
  Introduction and Objectives
  Status by Mission

    Chandra [P. Plucinsky, with H...

          History of Contaminatio...
          Current Status of the Co...
      XMM-Newton [M. Smith]
      Suzaku [E. Miller]
      AstroSat [S. Chandra]
      Swift [A. Beardmore]
      NICER [C. Markwardt]
      NuSTAR [K. K. Madsen]
      eROSITA [F. Haberl]
      MAXI, HXMT?
  Plans for Mitigation or Monitorin...
      Athena [A. von Kienlin]
      Arcus [E. Miller]
      XRISM [Coordinated by E. Mi..
      IXPE [W. Baumgartner]
      SMILE/SXI [S. Sembay]
      Einstein Probe, eXTP?
  Summary
      Sources of Contamination
      Best Practices to Avoid Cont...
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