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Exploring Fundamental Particle Acceleration and Loss Processes in Heliophysics through an Orbiting X-ray Instrument in the Jovian System

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In companion Decadal white papers(Clark+,2022;Kollmann+,2022;Turner+,2022), we present the case for exploring fundamental acceleration & loss processes in heliophysics through the natural laboratories of Jupiter's radiation belts and mission concept COMPASS. Here, we focus on using X-rays for global context, to address longstanding questions & to provide a stepping-stone to astrophysical systems.



[Exploring Fundamental Particle Acceleration and Loss Processes in Heliophysics through an Orbiting X-ray Instrument in the Jovian System.pdf](#)