

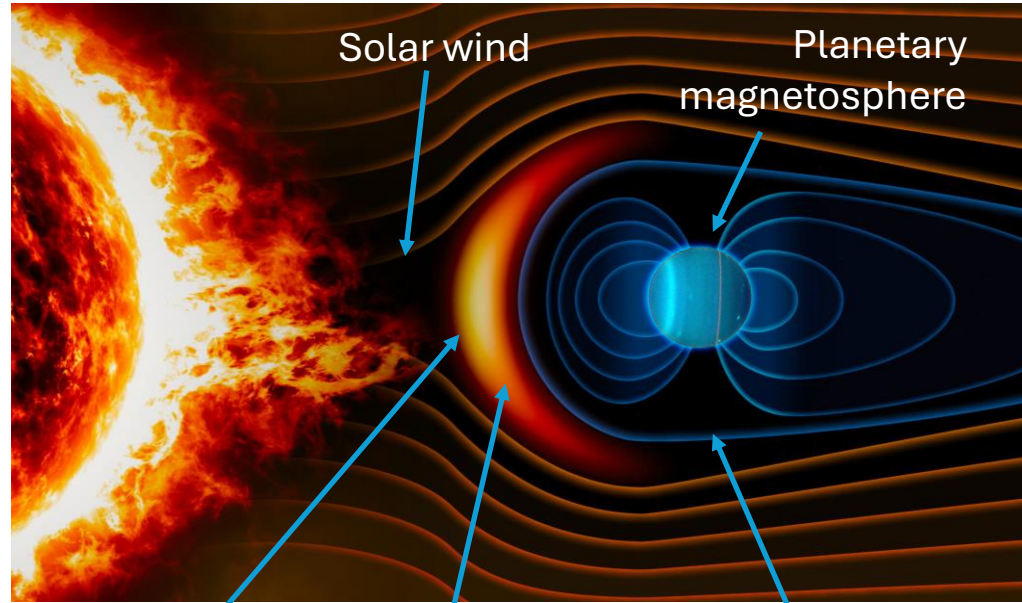
Can We Detect Soft X-Rays from Uranus's Magnetosheath?

Dan Naylor

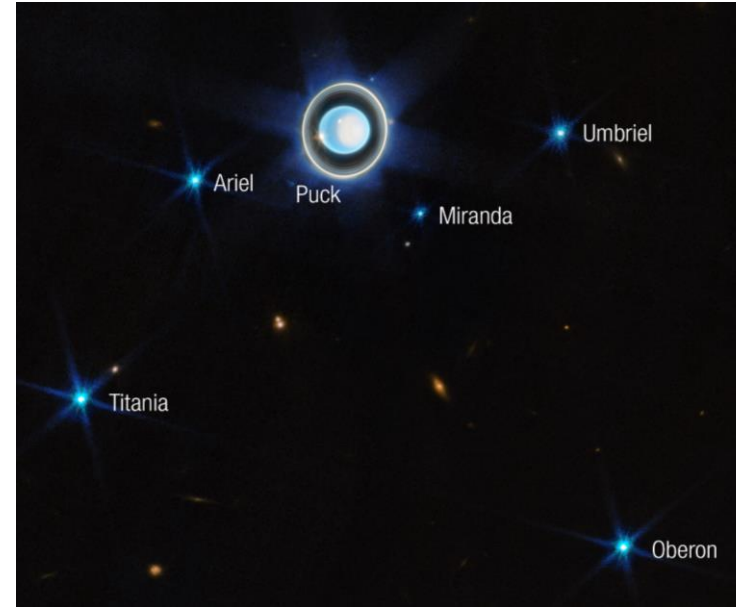
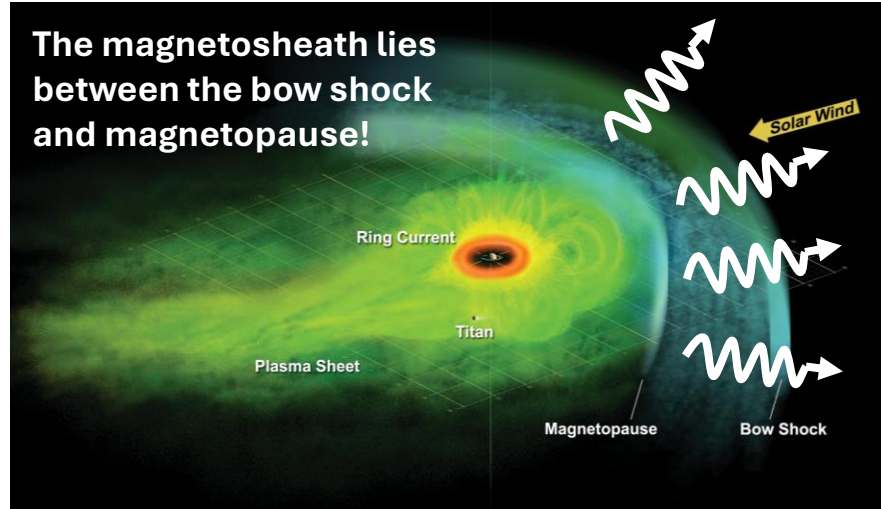
1st Year PhD Student

Space and Planetary Physics Group

How is Soft X-Ray Emission Generated?



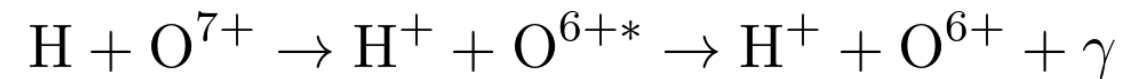
Bow shock **Magnetosheath** Magnetopause



Icy moons source
water-group
neutrals to the
system

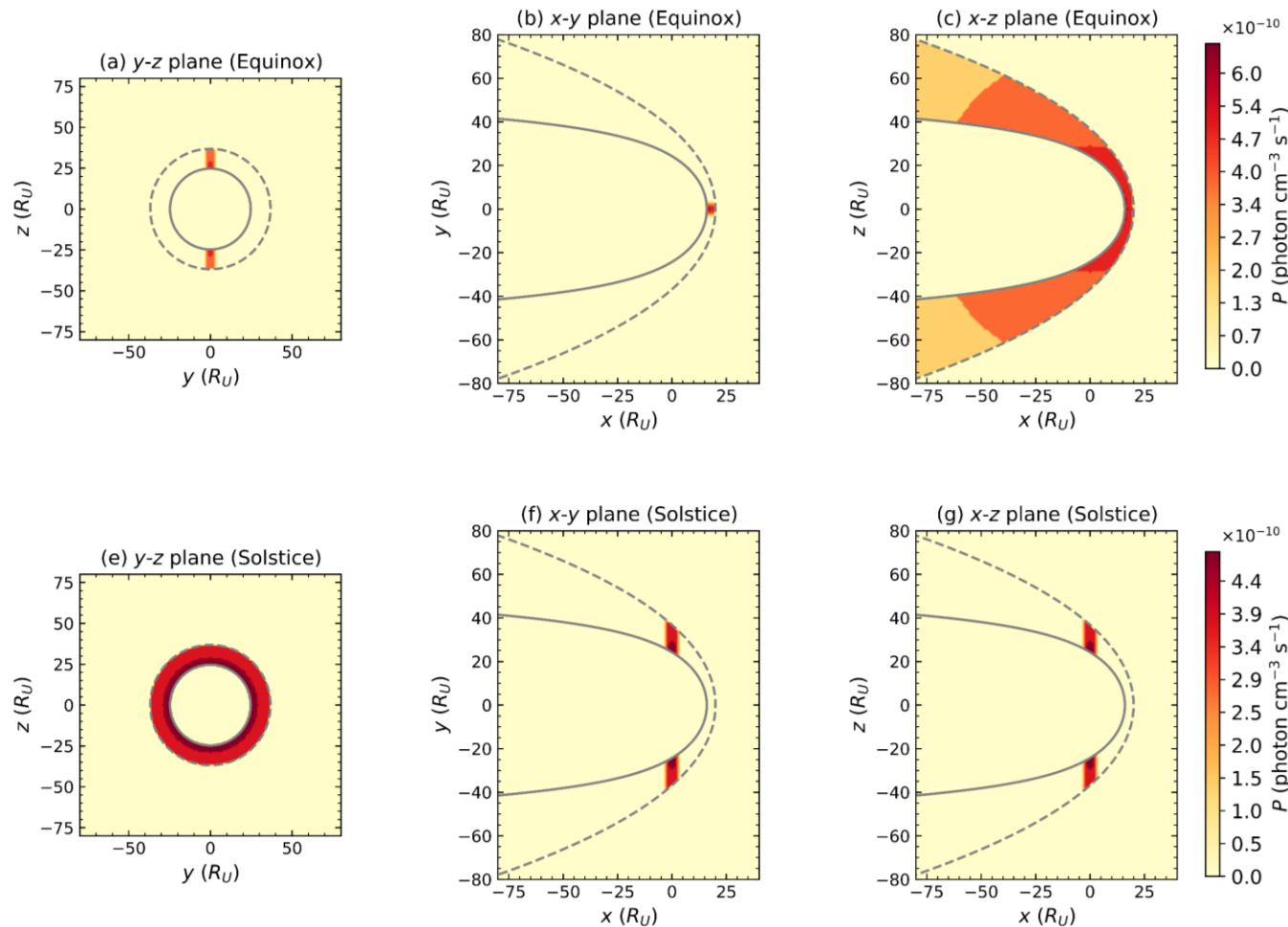
Source rates
unconstrained

X-ray emission generated by **charge exchange**:



Imaging the X-rays provides a **dynamic, global** view of the magnetosheath

Can We Detect the X-Ray Emission?



Several questions:

1. How does neutral density drive emission?
2. Do solar wind variations affect emission?
3. Can we detect the emission in reasonable timescales?

Promising results that justify further model development!