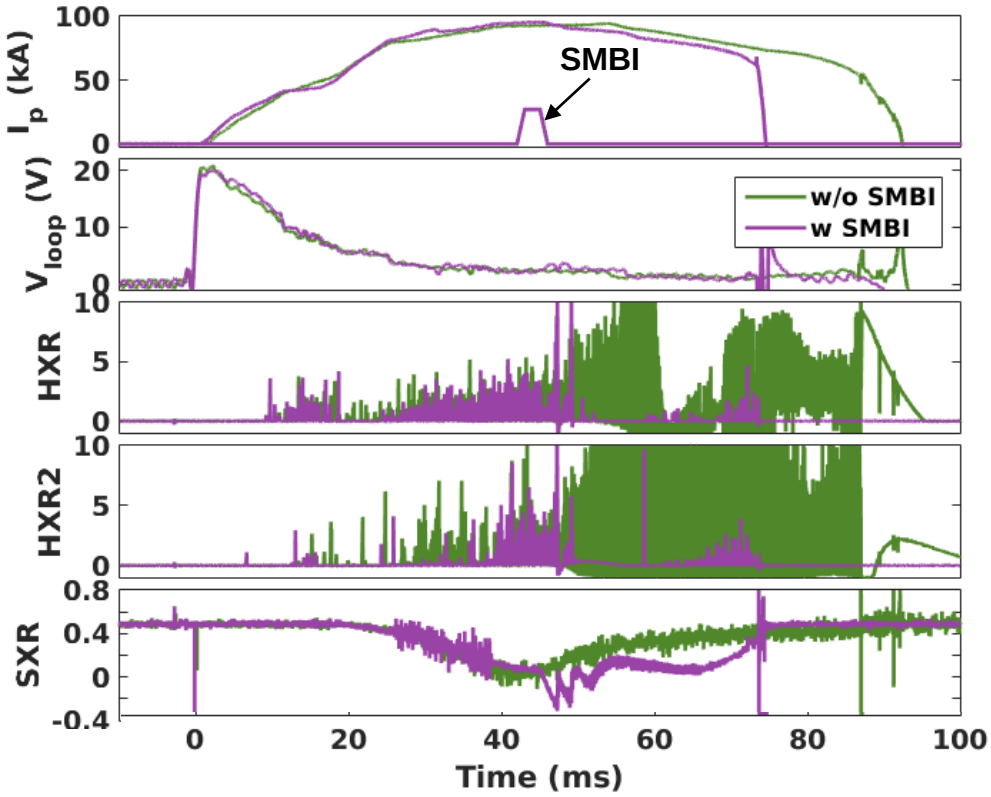
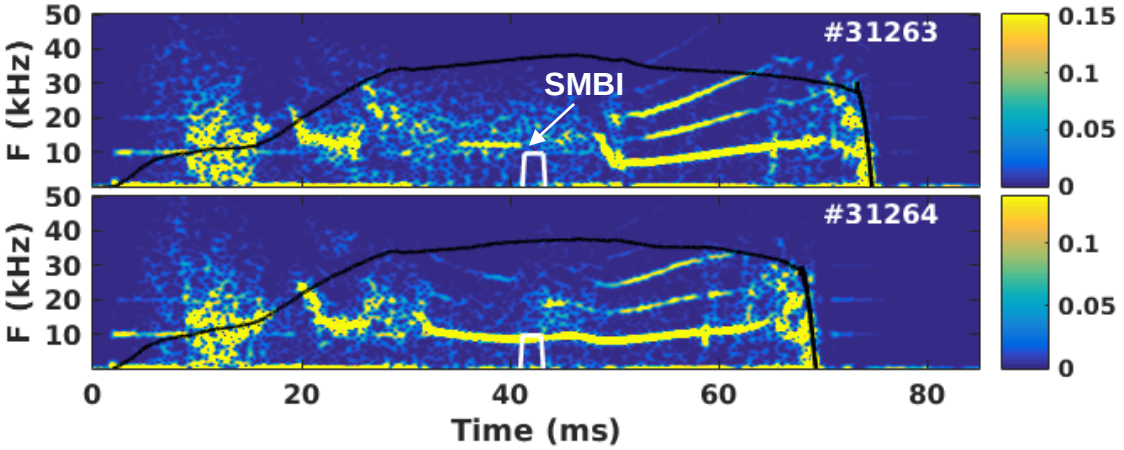
Runaway Electron (RE) Mitigation Using Supersonic Molecular Beam Injection (SMBI) in the Aditya-U Tokamak: EX/P4-4

- A SMBI system, to enable deep penetration inside the plasma, installed on the low field side
- STUDIED: Mitigation of Runaway Electrons (REs) generated during start-up and burn-through



- Significant reduction of hard X-ray (HXR) with SMBI denoting successful RE mitigation – small reduction in I_p (runaway contribution reduced)
- Increased soft X-ray (SXR) signal indicates increase in density

- RE mitigation with SMBI is successful in shots with sharp frequency downshift of tearing modes (#31263) following SMBI, and not otherwise (#31264)



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