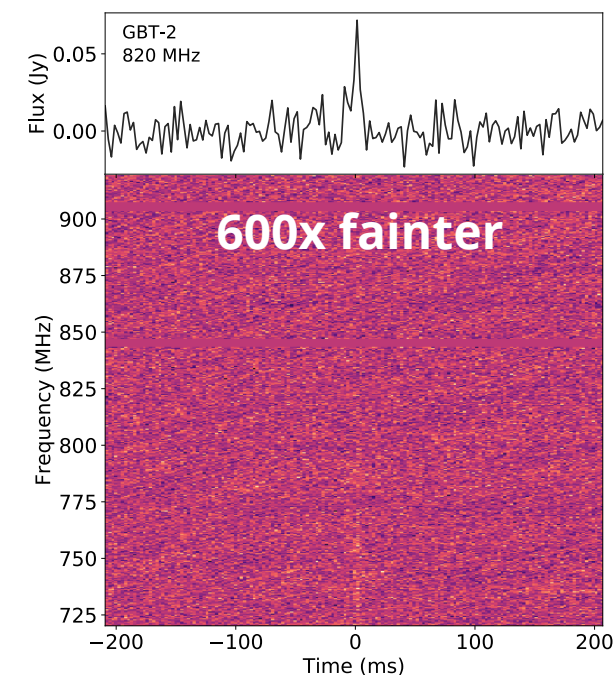
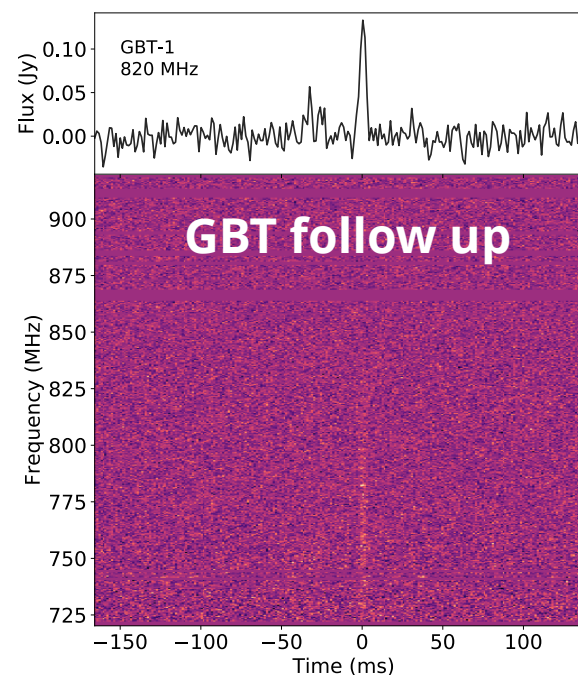
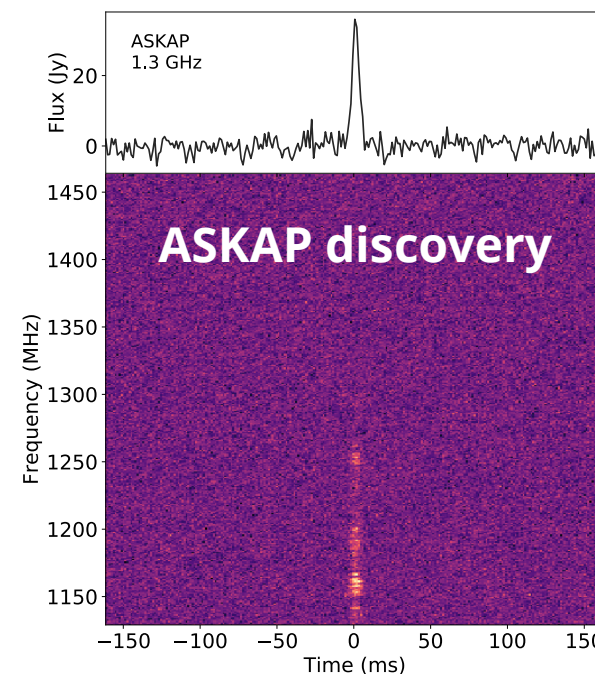


Swinburne Pulsar/Transient/GW group

- Matthew Bailes, Adam Deller, Ryan Shannon, Chris Flynn, Daniel Reardon, Jade Powell, Simon Stevenson, Andrew Jameson, Stefan Osłowski, Dean Shaff
 - 13 students (6 Indian nationals)
 - Currently reviewing Ph.D. applications at the moment: lots of talented Indian applicants!
- Pulsar searching
- Pulsar timing
- Pulsar instrumentation
 - SKA pulsar timing system design
- VLBI
- Scintillation/scintillometry/ISM
- FRBs
- LIGO
- Supercomputing
- Data Centres

An ASKAP burst repeats

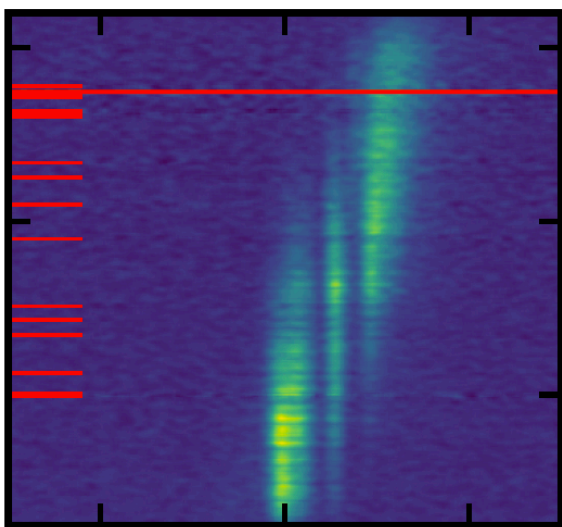
- Follow up of ASKAP FRBs with Parkes and Green Bank Telescope
- Pravir Kumar (Ph.D. student Swinburne): Searching for repeats in Green Bank Telescope and Parkes Ultrawideband
 - Understand RFI at different sites
 - Machine learning (D. Agarwal et al. 2019)
- Detected repeat pulses from one of the fly's eye bursts
 - Reliable localization method enables follow up with more sensitive telescope with smaller field of view
 - Pulses 10 months and 20 months after initial detection
- Repeat pulses a factor of 400 **fainter** than initial ASKAP detection



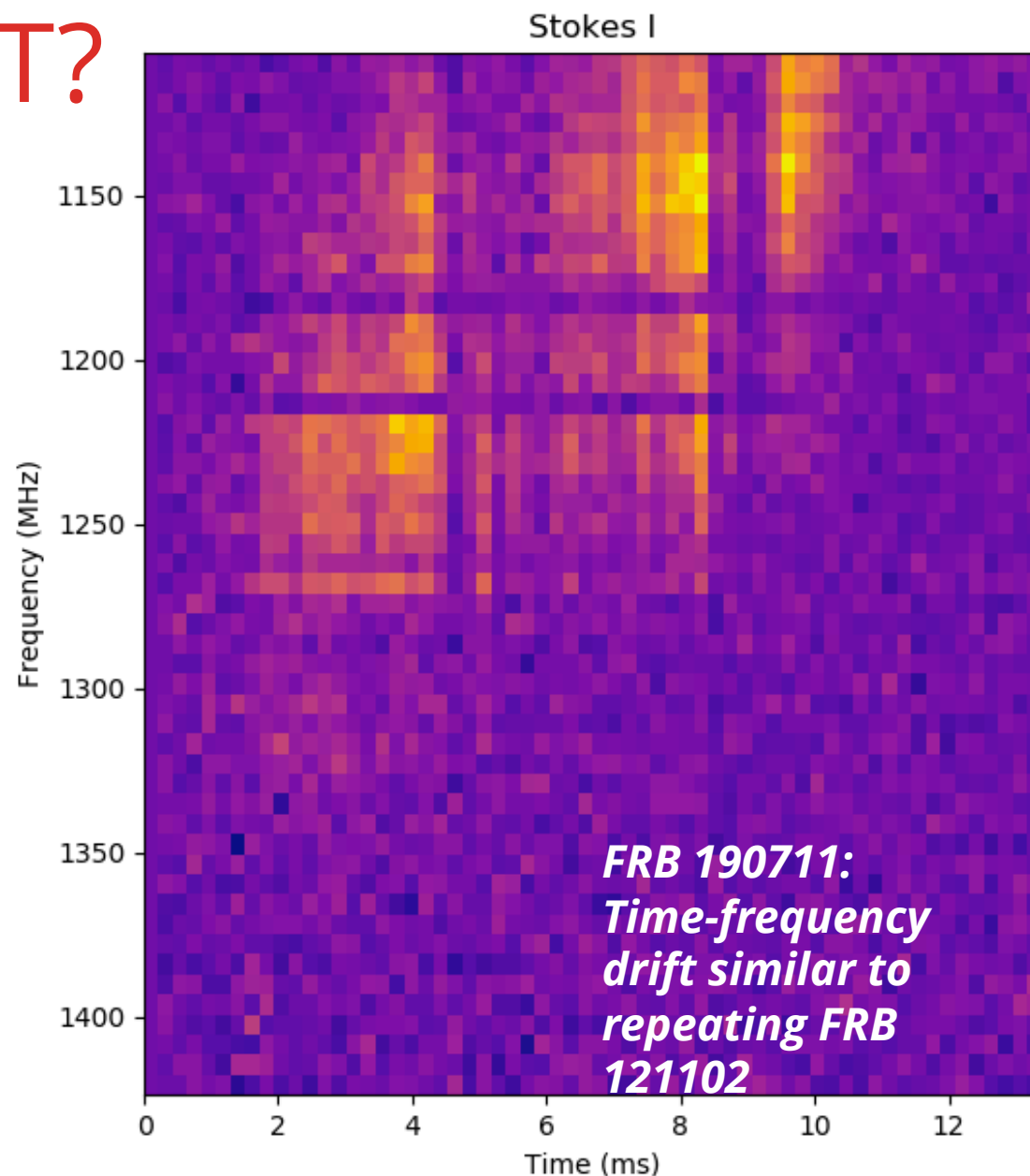
Kumar et al., submitted, arXiv:1908.10026

Follow up with GMRT?

- Repeat pulses faint
- Repeat pulses detected at lower frequency
- Need sensitive arrays to localize repeaters



FRB 121102 (Hessels et al. 2019)



Cherie Day et al. *in prep.*