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## **Magnetar short bursts, the low-twist model for FRBs, and what we can potentially learn**

*Thursday, 8 July 2021 18:10 (20 minutes)*

Recurrent magnetar short bursts in the X-ray are one of the defining features of magnetars. I will give a brief background on this phenomenology, some recent results, and discuss how they likely connect to FRBs. I will also highlight the low-twist magnetospheric magnetar model for FRBs which associates FRBs with short bursts that transpire in particular low charge density states of mature magnetars. Some theoretical and heuristic expectations will be discussed in the context of cosmological FRBs. I will discuss how clustered trains of FRB could potentially be associated with torsional crustal oscillations and how these could be used to constrain redshifts or the neutron star equation of state.

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**Session Classification:** What Can We Learn from a Growing Sample of Fast Radio Bursts?

**Track Classification:** Fast Transients: What can we learn from a growing sample of Fast Radio Bursts?