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The long-term periodicities in FRB burst times.

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Fast Radio Bursts (FRBs) are extremely energetic, millisecond-duration events of unknown origin. Some FRB sources emit repeat bursts, which offer great opportunities for follow-up observations. The Canadian Hydrogen Intensity Mapping Experiment (CHIME), with 1024 beams observing the sky simultaneously has increased the number of known repeating FRBs by orders of magnitude. The regular daily exposure of the instrument facilitates the search of periodicity on the timescale of days. Regular searches of long-timescale periodicities are carried out on CHIME repeaters. Last year, we found a 16-day periodicity on our most active FRB source. I will present the current status of the long-term periodicity searches and review different observation properties and theories corresponding to this periodic source and how it would improve our understanding of the progenitor.

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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?