

# FAST Proposal Coverpage

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## **Project Name:**

Rapid follow-up of precisely localised Fast Radio Bursts

## **Project Summary:**

*(A 1 paragraph summary of your project, including its scientific goals and how you will address them. This information will be potentially public.)*

Fast radio bursts (FRBs) are millisecond-duration radio flashes with extragalactic origins, which can serve as intergalactic and cosmological probes. One fundamental question about FRBs is whether they generically repeat. The answer to this question has profound implications on the nature of FRBs and on how we use FRBs as astrophysical tools. Here, we propose a Target of Opportunity (ToO) program with FAST to perform rapid follow-up of newly-detected and precisely localized FRBs by the Australian Square Kilometre Array Pathfinder (ASKAP). Combining the world highest sensitivity of FAST with the unique capability of ASKAP for localization, we will be able to achieve the deepest search of repeating FRBs and are likely to revolutionize our understanding of these extreme objects.