



# Introduction to the Probe opportunity

- The 2021 Decadal Survey asked NASA to create a Probe mission line in Astrophysics and discussed priorities for a Far-IR Probe and an X-ray Probe
- NASA responded promptly with a community announcement, describing the timetable for a Probe Announcement of Opportunity (AO)
  - Probes have a PI-managed cost cap of \$1B and may accept international contributions up to \$0.5B
  - The first Probe will be either a Far-IR Probe or an X-ray Probe and will launch by 2032
- Draft AO released on 16 August; final AO expected July 2023; proposal due October 2023
- Decadal goals for a Far-IR Probe:
  - tracing the astrochemical signatures of planet formation;
  - measuring the formation and buildup of galaxies, heavy elements, and interstellar dust from the first galaxies to today; and
  - probing the co-evolution of galaxies and their supermassive black holes across cosmic time.

<https://explorers.larc.nasa.gov/2023APPROBE/>