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I am a theoretical astrophysicist, who has worked on many different topics. These include theory of accretion disks, black hole energy extraction, jet propagation, evolution of single and binary pulsars in the Milky Way and in globular clusters, neutron star mergers, stellar evolution and stellar tides, quasars, the ionization of clouds in the intergalactic medium, tidal disruption of stars by black holes, and the propagation of FRB signals. I have also had leadership roles in the science teams of various space missions, including LISA, Ultrasat and currently UVEX.

In the FRB field, I am most interested in the use of FRBs to probe the circumgalactic medium of intervening galaxies, and to measure their near-host environments, respectively through the use of plasma lensing and strong-wave effects. I would love to understand the nature of FRB sources' structure and emission mechanisms, but having worked on pulsars for nearly 50 years, am less optimistic about definitive results in that area.