The road (and roadblocks) to EMRI search and inference

Alvin Chua, Caltech

Extreme-mass-ratio inspirals are the only LISA sources that combine the issue of strong-field complexity with that of long-lived signals. Discerning the presence and properties of putative EMRI signals in LISA data thus presents a profoundly difficult problem that epitomizes the various distinctive challenges of LISA data analysis. I review the evolving roadmap towards a successful EMRI observation, and discuss possible paths through the roadblocks ahead.