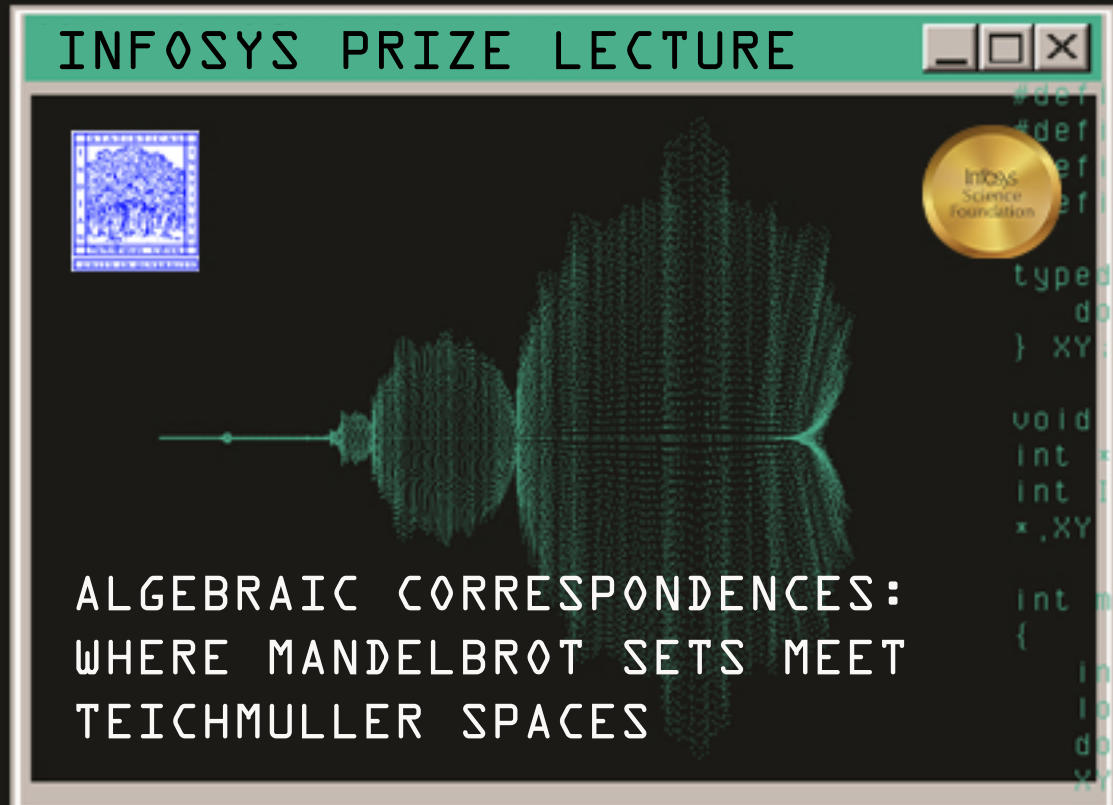




Connections between two branches of conformal dynamics—rational dynamics on the Riemann sphere and actions of Kleinian groups—have long been observed. Fatou envisioned in the 1920s that these actions could be studied within a unified framework of iterated algebraic correspondences. We provide concrete evidence to this vision by constructing algebraic correspondences as combinations/matings of complex polynomials and Fuchsian groups, allowing features of both theories to coexist in a single dynamical setting. At the level of parameter spaces, this leads naturally to products of Teichmuller spaces and Mandelbrot sets inside appropriate moduli spaces of ramified covers of the Riemann sphere.

We will outline the main analytic and algebraic ideas of this program, discuss connections with other areas of mathematics, and highlight several open questions.



THURSDAY
SEPT 17, 2026



5:00 PM - 6:00 PM



Platinum Jubilee Auditorium (PJA)
Indian Statistical Institute,
Bangalore Centre

RSVP

About the Speaker



Sabyasachi Mukherjee is the winner of the Infosys Prize 2025 in Mathematical Sciences. He was awarded for his powerful and original work linking two distinct areas: the dynamics of Kleinian group actions and the iteration of holomorphic and anti-holomorphic maps in complex dynamics. His results have reshaped our understanding of conformal dynamics. **Read more**

Co-Host



Indian Statistical Institute,
Bangalore Centre



INFOSYS PRIZE

