

Speaker: Takashi Kimura

Title: The topology of the moduli spaces of curves and cohomological field theories

Abstract: We will explain how graphs playing the role of "Feynman diagrams" naturally appear on compactifications of the moduli spaces of decorated Riemann surfaces. These spaces govern the factorization properties of cohomological field theories, an axiomatization of certain topological string theories. We will describe how intersection theory on related moduli spaces gives rise to cohomological field theories in such contexts as quantum cohomology and integrable systems.