## Periods in Homological Mirror Symmetry and Their Connection to Kloosterman Motives

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In this talk, we examine the role of periods in Homological Mirror Symmetry (HMS) within the frameworks of Zagier and Kontsevich [1], with particular attention to their connection with Kloosterman motives. Specifically, we will explore how the periods associated with the Landau-Ginzburg model are related to Kloosterman motives, building on the recent work of Fresán, Sabbah, and Yu[4]. The relationship between these periods and motives offers important insights into the underlying structures of mirror symmetry and its interaction with various geometric constructions. Additionally, we will analyze how Kloosterman connections contribute to the understanding of periods within the context of HMS.

Keywords: Homological Mirror Symmetry, Kloosterman Sheaves, Landau-Ginzburg Models,

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