Date: Thursday 31 January 2019 **Time**: 11:00 hrs
Place: Mayantigo building 6th floor meeting room
Title: Cool and Luminous Outbursts from Merging Binary Stars

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Abstract: There is mounting evidence of circumstellar material (CSM) distributed in disks and rings around many massive stars, supernovae, classical novae, and other interesting stellar objects. The origin of this CSM is often attributed to interactions within a binary star system, including poorly-understood processes such as the common envelope and stellar mergers. Recently, a connection was established between these astrophysically critical, catastrophic binary star interactions and a group of astronomical transients characterized by their red color and the luminosity in the gap between novae and supernovae. I will present an exploration of the dynamics of outflows from mass-losing binary stars and the associated menagerie of transients. I will discuss how is the binary enshrouded in a "death spiral" outflow and how does it explain many puzzling observed phenomena.