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Multiplicity and Inner Disk Reshaping in the Extreme Accretion Event of FUor V960 Mon

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V960 Mon is a recent FUor that underwent an accretion outburst in 2014. These extreme accretion events are transient stages in the stellar evolution, each detection is a rare gem for our understanding of how stars gain their mass and interact with their environment. Particularly, V960 has been observed shortly after its outburst with VLT/SPHERE and ALMA. Recently, these observations revealed interaction with companion stars on scales >1'000au, raising the question of how the outburst is related to the large-scale environment. Given the diversity of detected features and events, V960 presents an exceptional laboratory for the study of protoplanetary environments under extreme conditions. The accretion process itself that triggers the FUor event occurs on short time scales, consistent with an origin from close to the primary of the system. An inner disk has been proposed and modeled for the purpose of understanding the effects of accretion outburst on its morphology. To test this innermost region directly, V960 has been observed in 2015 during the outburst peak and post-outburst between 2016 and 2017 by VLTI/AMBER. In this occasion, I present an analysis of these data to detect and characterize the inner disk structure which presents the most-important link between the disrupted environment and the outbursting YSO. I will focus, specifically on its size and temperature, how it interrelates with the outbursting event and then discuss the impact of V960 Mon's multiplicity on the evolution of the inner disk and the sudden trigger of the accretion flow.

Presenter: Mr DAZA VALDEBENITO, Daniel (Niels Bohr Institute)

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