

Fragmentation and disk formation in high-mass star formation: The NOEMA large program CORE

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What are the fragmentation properties of the maternal gas clumps and the central disks during the formation of the most massive stars? How are the chemical properties of sub-structures linked to the different physical entities during high-mass star formation? I will present an overview of our NOEMA large program CORE that addresses these questions for a sample of 20 massive star-forming regions. Some topics to be discussed are: The fragmentation of the clumps, the characterization and stability properties of the embedded disk-like structures, the linked chemical properties, as well as gas flows from large to small spatial scales.