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St Martin d'Hères, March 22nd, 2019
N/Réf. : ANR SIMFoni
V/Réf. :

Agence Nationale de la Recherche
50, avenue Daumesnil
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FRANCE

To Whom it may concern,

Dr Frederique Motte and her collaborators have been power users of IRAM facilities ever since the 90tes. Her research, which at that time had established the first systematic view on the column density profiles of prestellar cores, has broadened over time to cover now most aspects of the fundamental questions of star formation in molecular clouds. The crucial question of relation between cloud structure and characteristics and stellar mass function is one of the most important puzzels in modern astronomy. While considerable progress has been made in some aspects many important pieces are still missing for a good understanding of the envolved processes and their relevance in a statistical sense. The new millimeter facilities and instruments of IRAM, NOEMA and NIKA 2 have now opened the path which will allow to test competing models of starformation in a statistically sound way.

If selected the proposal of F. Motte will allow to make a big path forward with this facilities, which have been to a good part also been financed through ANR (f.ex. EQUIPEX NOEMA). Considering the large amounts of data which will be generated through the instruments in the next years, the plan and request of F. Motte to create a powerful working group financed through an ANR grant is very timely.

F. Motte has shown that she is persuing her projects with great persistence, efficiency and high scientific output. With her track record her chances to obtain important amounts of observing time and sets of data also in the near future are close to certainty. I thus highly recommend the related project SIMFoni for funding.

Dr Karl-Friedrich Schuster
Director IRAM