

You are welcome to nominate speakers to colloquium@nao.cas.cn. The video and slides of previous colloquia and more information can be found at <http://colloquium.bao.ac.cn/>.

国台学术报告 NAOC COLLOQUIUM

2016 年 第 38 次 / No. 38 2016

Time: Wednesday 2:30 PM, Nov.30 Location: A601, NAOC

Star formation: major results from the Herschel Space Observatory

Prof. Annie ZAVAGNO

Marseille Astrophysics, Aix Marseille University, France



Prof. Annie ZAVAGNO attended the University Paris Diderot where she received her Master degree in Astrophysics and Space Science. She then moved to Marseille in the South of France where she earned a PhD in Astrophysics in 1993. She obtained a postdoctoral fellowship from the European Space Agency and she moved to Italy (in Rome) to work on millimeter emission of young stars, from 1994 to 1996. She came back to Marseille in 1996 with a postdoctoral fellowship from the French Academy of Science to continue her research work on young stellar objects and ionized regions, working on data she obtained, as a principal investigator, using the Infrared Space Observatory (ISO). She obtained a permanent position at Aix Marseille University in 1997 where she is now Senior Lecturer in Physics. Her research interests concern the early stages of high mass star formation and the relation between ionized region and star formation.

Abstract

High mass stars control the evolution of galaxies. However the way these stars form is still debated. The only way to understand their formation is to observe them at the earliest stages of their formation. However, because these stars are rare, it is difficult to find them in the early stages of their evolution. They form in cold massive dense clumps. The far-infrared and millimeter ranges are therefore perfectly suited to study the earliest stages of their formation. The Herschel Space Observatory has provided us with an extraordinary new view of (high mass) star formation. I will present the Herschel HOBYS and Hi-GAL key programs and summarize the main results obtained on star formation from these programs. These results include the existence of filaments, the physical properties of young stars/clumps (mass, temperature, luminosity) and the relation of these stars with the surrounding interstellar medium. I will present the star formation as a highly dynamical process and show the close relation of these stars with their immediate surrounding. I will conclude on the perspectives open in this research field by the Herschel observatory, including ground and space-based programs dedicated to the earliest stages of star formation.



All are welcome! Tea, coffee, biscuits will be served at 2:15 PM.