



**Séminaire organisé par**

**AIM & Le service d'Astrophysique  
CEA/DSM/Irfu**



## **THE WONDERFUL LIVES OF MASSIVE STARS UNTIL THEIR FINAL EXPLOSIONS AND BEYOND**

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Massive stars are rare and short-lived. Nevertheless, through their extreme brightness, strong outflows and powerful explosions, they heat and stir their surroundings, drive outflows on galactic scales, are thought to be responsible for reionization and the main production the heavy elements in the Universe. Because of their large impact, evolutionary models of massive stars are an essential ingredient for a wide variety of astrophysical problems. Recently it has become clear that the majority of massive stars, possibly as much as 7 out of 10, will experience severe interaction with a binary companion. I will discuss several aspects of our quickly increasing understanding of how this affects (1) the lives of massive stars, (2) our interpretations of observations of young stellar populations nearby and at high redshift and transient phenomena and (3) our understanding of the role that massive stars play through their radiative, mechanical and chemical feedback.

**mardi 22 mars 2016**

**10h00 Salle Galilée bât 713 - Orme des Merisiers**



**Le petit-déjeuner précèdera le séminaire**

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