

## Key Reactions in Nuclear Astrophysics

June 22-23, 2021 on ZOOM Platform

### Abstract | Main Topics

The workshop intends to discuss existing results in nuclear astrophysics and to identify key reactions for which the stable and RIB facilities need to assess information of interest for nuclear astrophysics. Physicists working on stellar modeling and observations (astronomy, cosmochemistry ...) together with theoreticians and experimentalists working on nuclear reactions will meet with the purpose of identifying stellar scenarios needing nuclear reaction data that make sizable difference in stellar evolution and the optimal methods to obtain them.

### Keynote speakers

Alessandro **CHIEFFI**, *Istituto Nazionale di Astrofisica – IAPS, Rome, Italy;*  
Sandrine **COURTIN**, *Institut Pluridisciplinaire Hubert Curien, Strasbourg, France;*  
Scilla **DEGL'INNOCENTI**, *Dipartimento di Fisica, Università di Pisa, Italy;*  
Carla **FROHLICH**, *Department of Physics, North Carolina State University, North Carolina;*  
Taka **KAJINO**, *National Astr. Observatory of Japan, Tokyo, Japan & Beihang Univ., Beijing, China;*  
Grant **MATHEWS**, *Center for Astrophysics, Notre Dame University, Indiana;*  
Jorge **PEREIRA**, *National Superconducting Cyclotron Laboratory, Michigan State University, Michigan;*  
Moritz **PLEINTINGER**, *Max Planck Institute for Extraterrestrial Physics, Garching- Munich, Germany;*  
Giuseppe Gabriele **RAPISARDA**, *Università degli Studi di Catania, Catania, Italy & INFN-LNS;*  
Alexandra **SPIRIDON**, *Institute of Physics and Nuclear Engineering, IFIN-HH, Romania;*  
Rebecca **SURMAN**, *Dept. of Physics, University of Notre Dame, Indiana*

### Organizers

Aurora **TUMINO**, *Facoltà di Architettura e Ingegneria Università degli Studi di Enna "Kore" & INFN-LNS;*  
Jordi **JOSÉ**, *Technical University of Catalonia;* Carlos **BERTULANI**, *Texas A&M University-Commerce,*  
Livius **TRACHE**, *IFIN-HH Bucarest-Magurele;* Roland **DIEHL**, *Max Planck Institut fuer extraterrestrische Physik*

Director of the ECT\*: Professor Gert **Aarts** | The ECT\* is part of the Fondazione Bruno Kessler.  
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