

# 2024 ZFS Workshop Agenda

## Tuesday August 6

6:00 to 8:00 pm Registration and reception with appetizers: Casablanca

## Wednesday August 7

8:30 – 12:00 Plenary session opening remarks, Z Facility status, and program reviews: Barcelona

8:30 – 9:00 Randy McKee, Sandia  
Welcome and introduction

9:00 – 9:30 Michael Jones, Sandia  
Z Machine update

9:30 – 10:00 Eric Harding, Sandia  
Diagnostic update

10:00 – 10:30 Break

10:30 – 11:00 Dan Mayes, University of Texas, Austin  
Laboratory tests of stellar interior opacity models

11:00 – 11:30 Thomas Gomez, University of Colorado, Boulder  
How line broadening provides insight into atomic behavior in HED plasmas

11:30 – 12:00 Bart Dunlap, University of Texas, Austin  
Atomic processes in white dwarf atmospheres in the laboratory

12:00 – 1:30 Lunch

1:30 – 3:45 Plenary session program reviews: Barcelona

1:30 – 2:00 Georges Jaar, University of Nevada, Reno  
Radiation heating and cooling, and the thermal stability of x-ray photoionized plasmas

2:00 – 2:30 Patty Cho, University of Texas, Austin  
Testing high-density and transient effects in photoionized plasma emission from black hole accretion

2:30 – 3:00 Jack Hare, Massachusetts Institute of Technology  
MARZ: MAgnetic Reconnection on Z

3:00 – 3:30 Derek Schaeffer, University of California Los Angeles  
Magnetized Collisionless Shocks on Z

3:30 – 3:45 Break

3:45 – 5:30 Break-out sessions: Barcelona, Majorca, Catalina, Valencia

## **Thursday August 8**

- 8:30 – 11:50 Plenary session program reviews: Barcelona
- 8:30 – 9:00 Sarah Stewart, Arizona State University  
Formation and evolution of Earth-like and Water-World planets
- 9:00 – 9:30 Alisha Clark, University of Colorado, Boulder  
Origin of Earth's water: Role of hydrous melts at extreme P-T conditions
- 9:30 – 10:00 Steven Jacobsen, Northwestern University  
Origin of the ultra-low velocity zones atop Earth's core-mantle boundary
- 10:00 – 10:30 Break
- 10:30 – 11:00 Jim Hawreliak, Washington State University  
Advances and opportunities at the Dynamic Compression Sector
- 11:00 – 11:30 Jonathan Skidmore, First Light Fusion  
Development of a flyer driven hydrodynamic pressure amplifier system for the study of quartz Hugoniot and release on Z.
- 11:30 – 11:50 Mike Winey, Washington State University  
Shock-induced melting in diamond single crystals
- 11:50 – 1:15 Lunch
- 1:15 – 4:00 Break-out sessions: Barcelona, Majorca, Catalina, Valencia
- 4:00 – 4:30 Poster session setup
- 4:30 – 6:30 Student poster session

## **Friday August 9**

- 8:30 – 9:30 Plenary session: Barcelona
- 8:30 – 9:30 Jens Schwarz, Sandia  
ZNetUS and opportunities at the Mykonos pulsed power facility
- 9:30 – 11:30 Break-out sessions: Barcelona, Majorca, Catalina, Valencia
- 11:30 – 12:00 Plenary session closing remarks: Barcelona
- 12:00 – 1:30 Lunch