

Summer School Alpbach 2026

High energy processes in planetary systems

July 14 - 23



JURY EVALUATION

Chairman: Ferdinand Plaschke, Technical University Braunschweig

Members:

Ilja Skrypnyk, ESA Education

Gabriel Giono, Space Research Institute Graz

Andreas Geisler, FFG

Observing Member: Peter Falkner, ESA, Head Tutor

BEST SCIENCE CASE: TEAM YELLOW

The Jury believes that the best science case award should go to the yellow team. The team presented a mission dealing with a science question that is most fundamental to humanity: the evolution of stars in the ultra-violet regime and its implications for the development planetary atmospheres and life beyond the Solar System. The broad theme of the mission proposed by the team is extremely appealing to society in general, as well as to many different science communities, thereby laying the groundwork for international and interdisciplinary scientific collaborations to maximize the scientific output. The valuable results are expected to have a significant impact far beyond the academic domain.

BEST SPACECRAFT AND PAYLOAD ENGINEERING: TEAM BLUE

The Jury believes that the best spacecraft and payload engineering award should go to the blue team. The team delivered the most thorough analysis of requirements set by the underlying science question and the best development of a technical platform that is capable of investigating the volcanic activity of Io and its implications for the ambient plasma environment under the harsh environmental conditions of the Jovian system. The jury recognizes the team's excellence in mastering engineering trade-offs and in justifying a significant number of decision-relevant parameters. This enabled good engineering decision making, giving the presented solution the highest credibility.

BEST CONCEPT OF OPERATIONS: TEAM RED

The Jury believes that the best concept of operations award should go to the red team. The concept of operations development and the corresponding mission analysis become dominant engineering tasks when multiple spacecraft need to be operating under severe constraints. Based on a highly ambitious scientific question, team red excelled at designing an optimal orbit concept and at planning an effective usage of instrument and other onboard resources over the regions of interest, backed by a top tier analysis. In the view of the jury, the key flow-down of requirements was handled best by the team, enabling the smoothest transition from goals to actions.

MOST INSPIRATIONAL MISSION: TEAM GREEN

The Jury believes that the most inspirational mission award should go to the green team. The team presented a highly ambitious yet realistic mission concept to Uranus to explore the highly dynamic and seasonal character of the system, yielding the maximum societal impact if it were ever implemented. The mission is by far the most exploratory in nature, yet proven by the team to be cost-effective and feasible within the L class framework and financial envelope. For Europe and for humanity in general, this would be a unique mission with an exceptional appeal, as the only measurements taken so far in the Uranian system were performed during one flyby by the Voyager 2 spacecraft in 1986.