

Division of Science Annual Research Conference 2025 Agenda

January 20, 2025 | 9:15-4:15pm | C2, East Forum

9:30-9:45am **Welcome Remarks and Introduction**

SESSION ONE

9:45-10:05am **Patrick Oliveira Santos**
Large Quantum Channel

10:05-10:25am **Vigneshwaran Krishnamoorthi**
Aeolian Sediment Lithification from Late-stage Aqueous Activity in Gale Crater, Mars: Implications for Habitability

10:25-10:45am **Sarah Daakour**
From Depths to Networks: the Interactome of Prochlorococcus marinus Probed by Genome-scale Yeast Two-hybrid and Deep Learning

10:45-11:00am **Break**

SESSION TWO

11:00-11:20am **Raghavendra Tripathi**
CLT in Complete Feedback Games

11:20-11:40am **Amaria Javed**
Quantum Sensing using Spin Defects in Diamond

11:40-12:00pm **Shrouq Mujahed**
Ground-State Redox Catalysis Enabled by Organic Nitrogen-Centered Persistent Radicals

12:00-1:00pm **Lunch Break**

1:00-2:00pm

Poster Session

SESSION THREE

2:00-2:20pm

Francisco Ribeiro

On LLMs' Internal Representation of Source Code Correctness

2:20-2:40pm

Shanshan Li

Prefrontal Cortex Modulation Enhances Working Memory Representations: A Model-based Neuroimaging Study

2:40-3:00pm

Nadine El Said

Nuclear actin-dependent Meg3 Expression Suppresses Metabolic Genes by Affecting the Chromatin Architecture at Sites of Elevated H3K27 Acetylation Levels

3:00-3:15pm

Break

SESSION FOUR

3:15-3:35pm

Balaraju Battu

Perception of Experience Influences Altruism and Perception of Agency Influences Trust in Human-Machine Interactions

3:35-3:55pm

Sabine Fakhoury

Testing a Theory of Change: Abu Dhabi Parenting Program

3:55-4:15pm

Emre Yörük

Exploring the World of Nanocrystals using Electron Diffraction