

TECHNOLOGIES AND INNOVATION TO SUPPORT THE SEARCH FOR LIFE IN THE SOLAR SYSTEM, 2025-2050:

GANYMEDE

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ABSTRACT

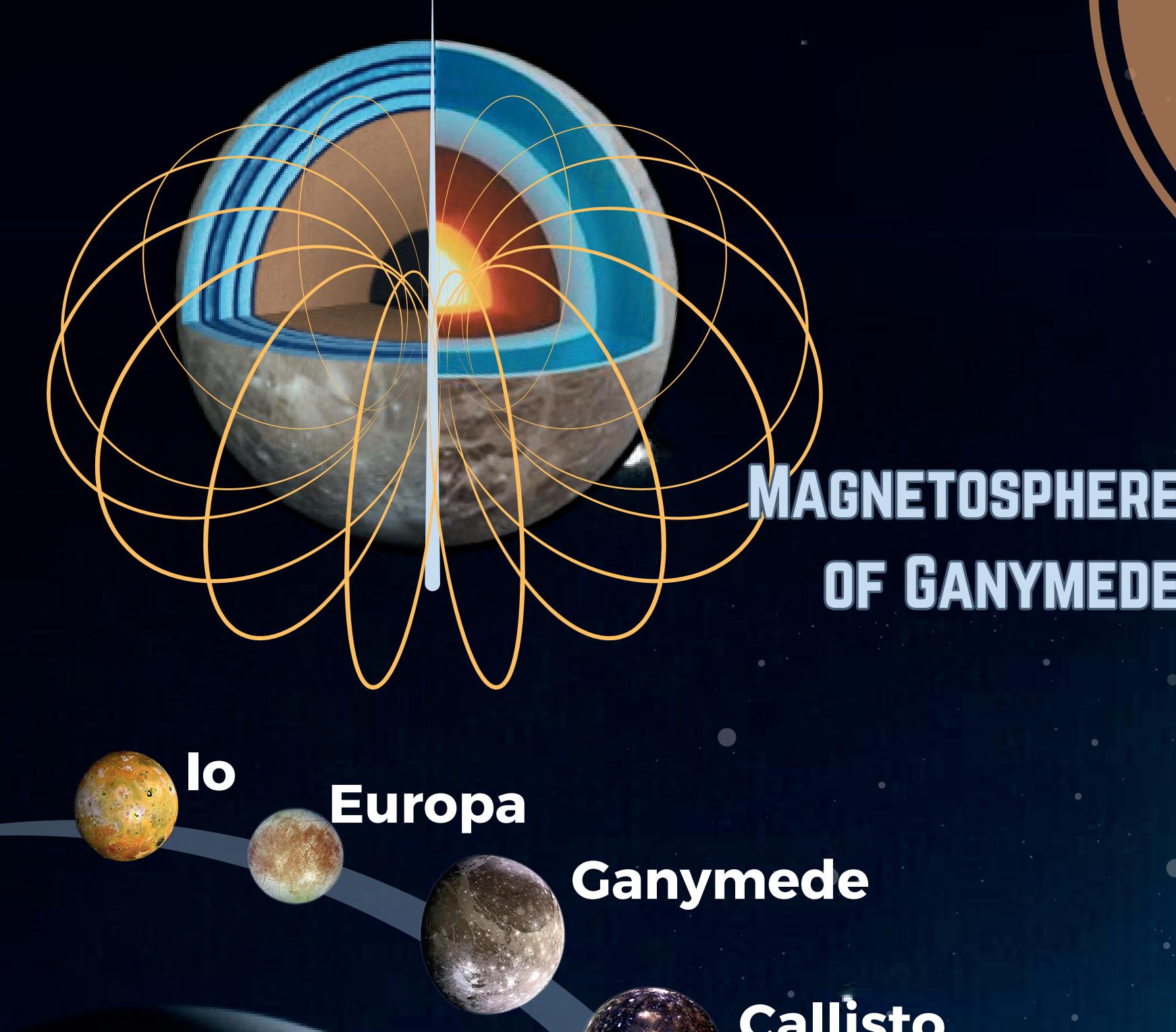
The search for life in the universe extends beyond planets, into the intriguing potential of moons. Ganymede is the largest moon orbiting Jupiter, and in the solar system. It has fascinated scientists over the decades as a subject for astrobiology research due to its suggested capacity to harbor water-rock interactions, with a subsurface ocean beneath its icy crust.

INTRODUCTION

- HISTORY
- WHY GANYMEDE?
- INNOVATION & TECHNOLOGY
- PROPOSED MISSION
- ASTROBIOLOGY CASE
- PLANETARY PROTECTION
- INTERVIEW REPORT

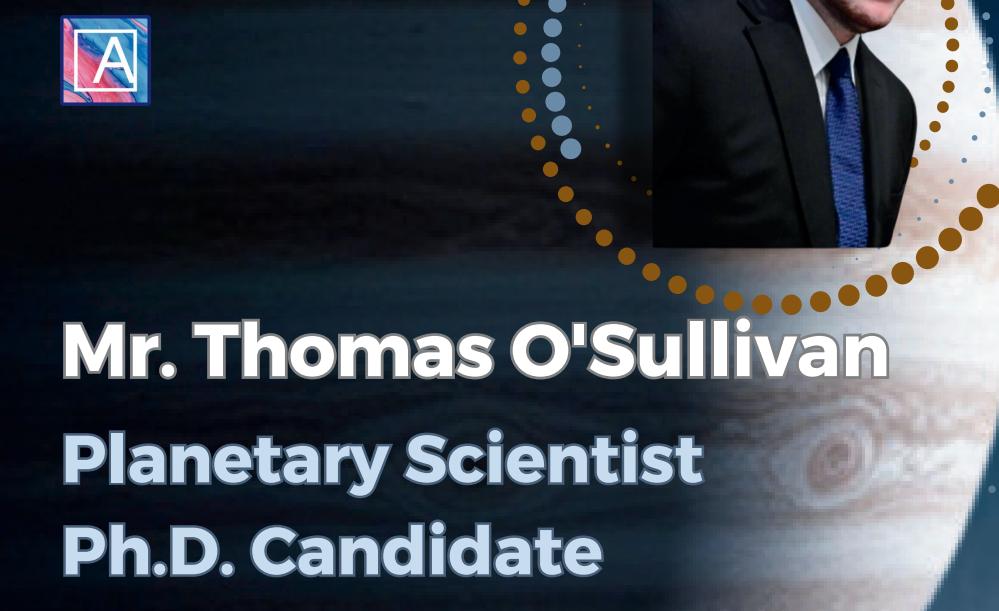


TWO POSSIBILITIES OF THE INTERIOR OF GANYMEDE



MAGNETOSPHERE OF GANYMEDE

INTERVIEW REPORT

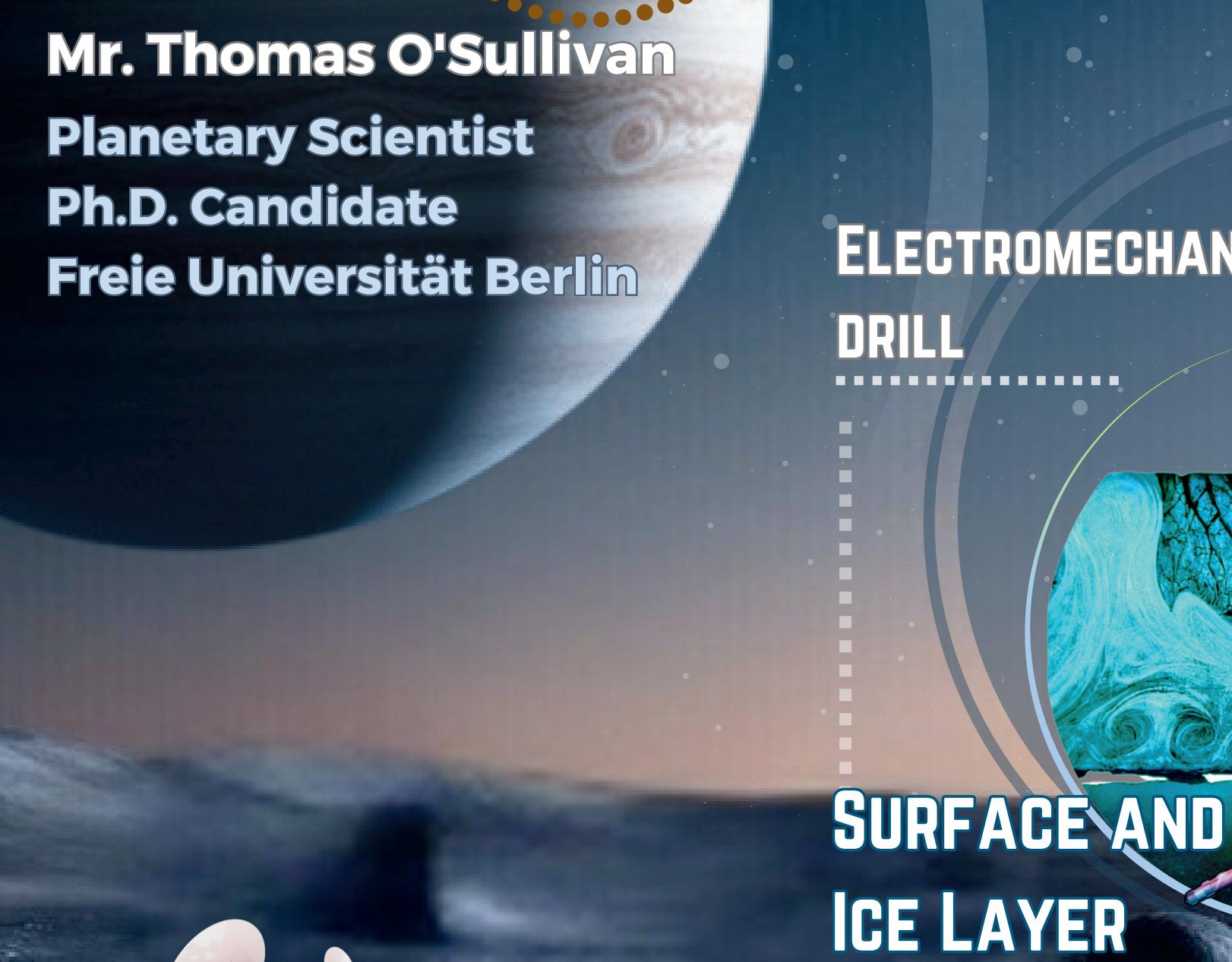


Mr. Thomas O'Sullivan
Planetary Scientist
Ph.D. Candidate
Freie Universität Berlin

FUTURE EXPLORATION AND TECHNOLOGIES

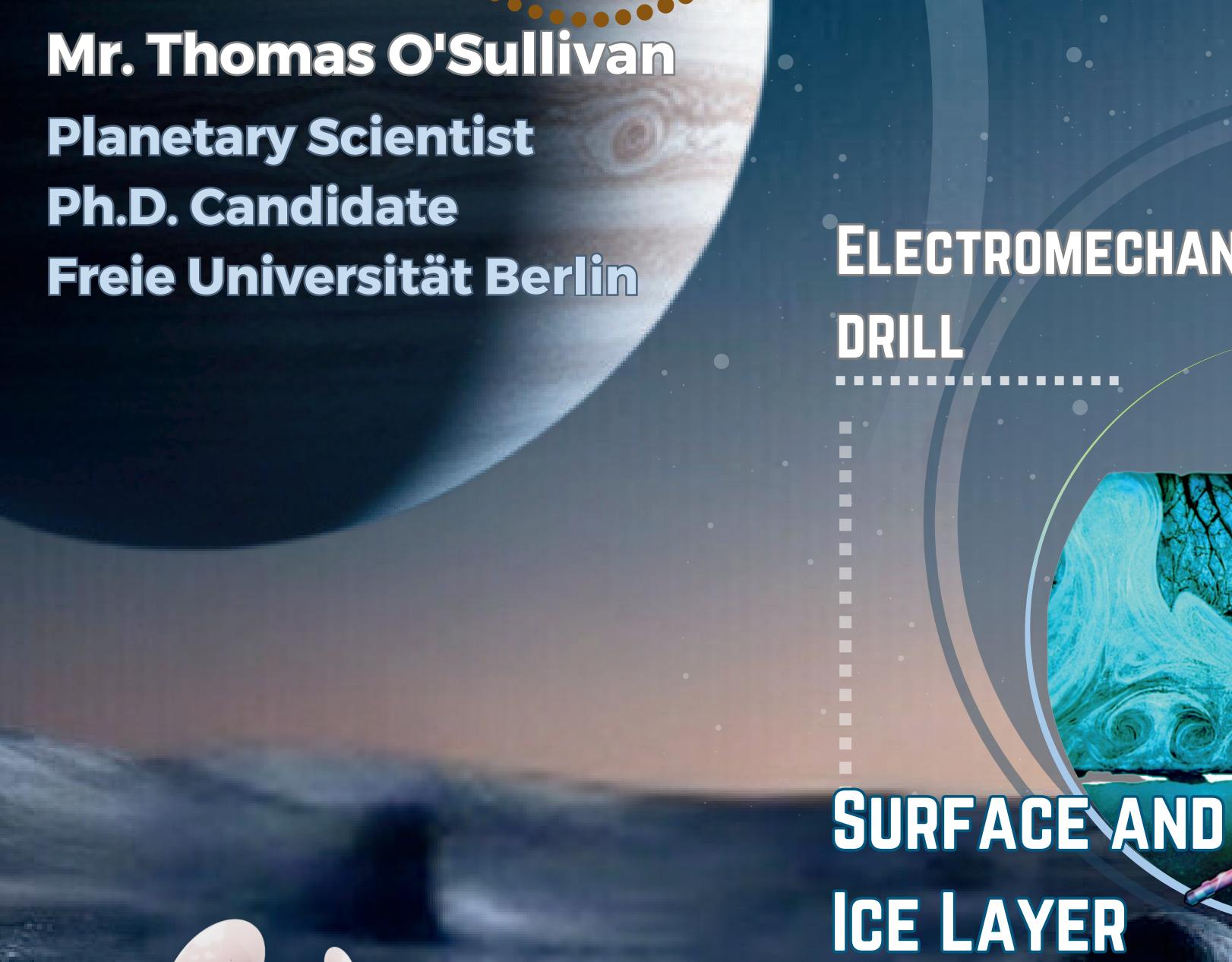
SUBSURFACE EXPLORATION ROVERS

Ganymede's surface temperatures average -163°C, facing intense radiation from Jupiter's magnetosphere. Its thick ice shell presents a significant barrier to exploring the underlying ocean.



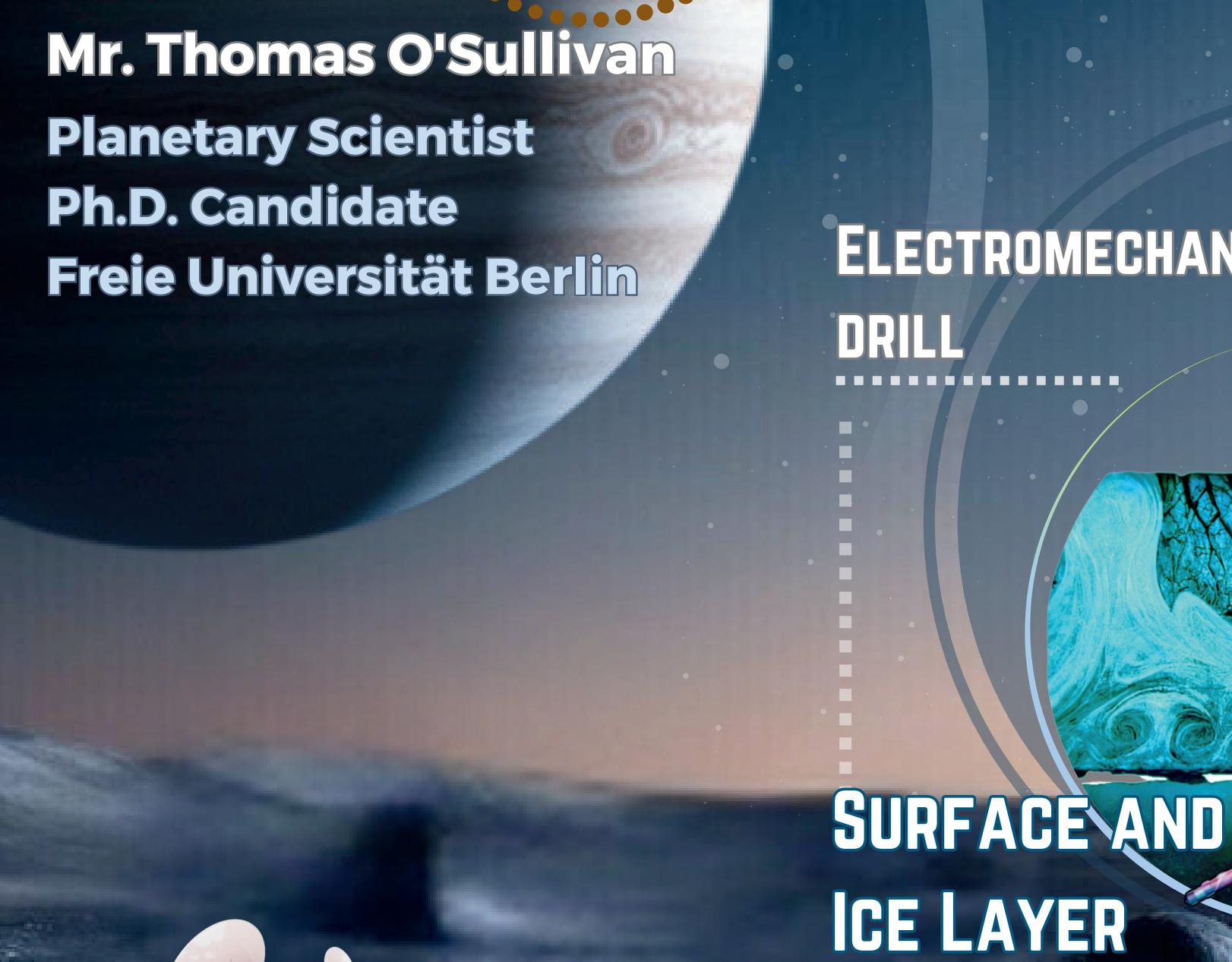
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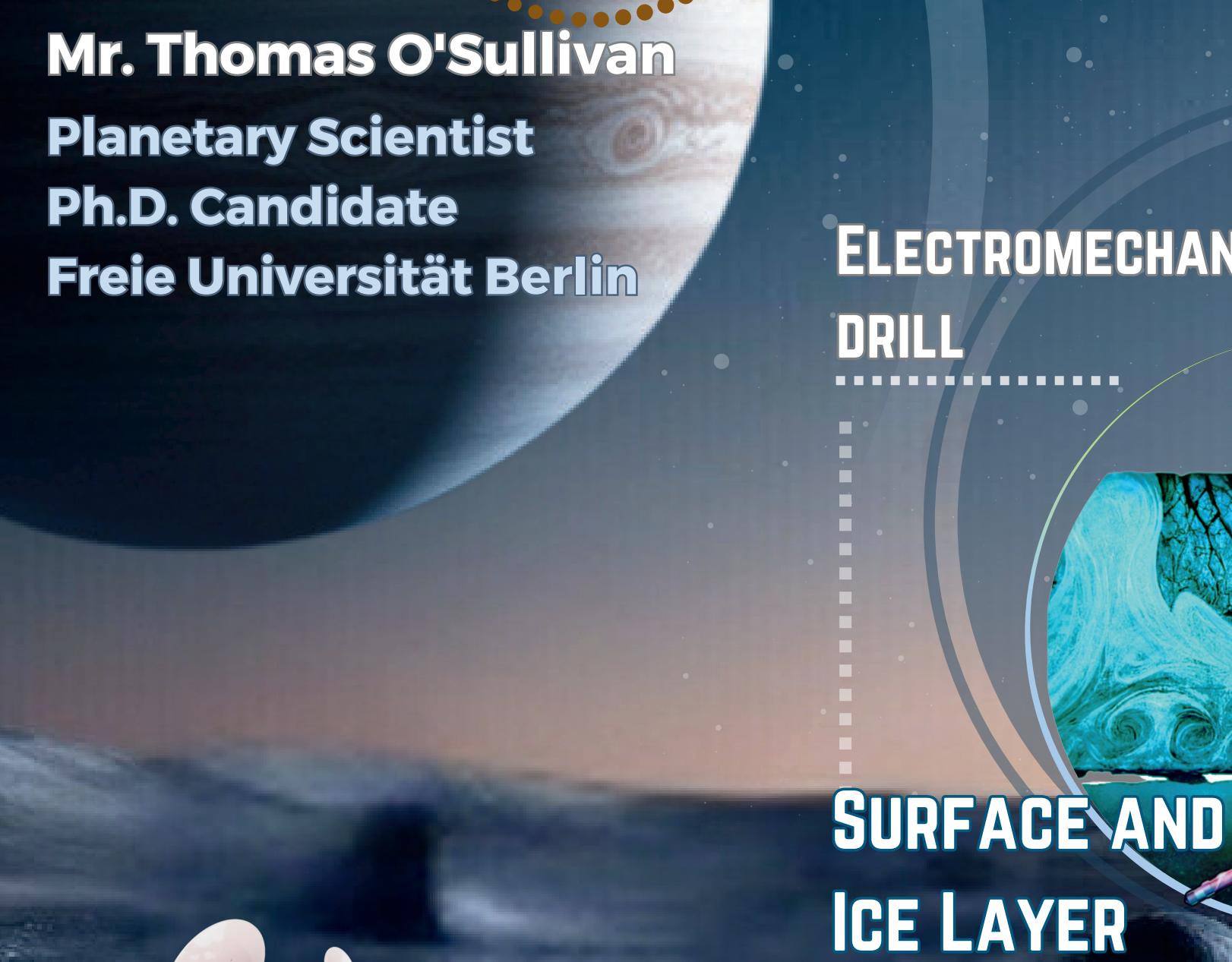
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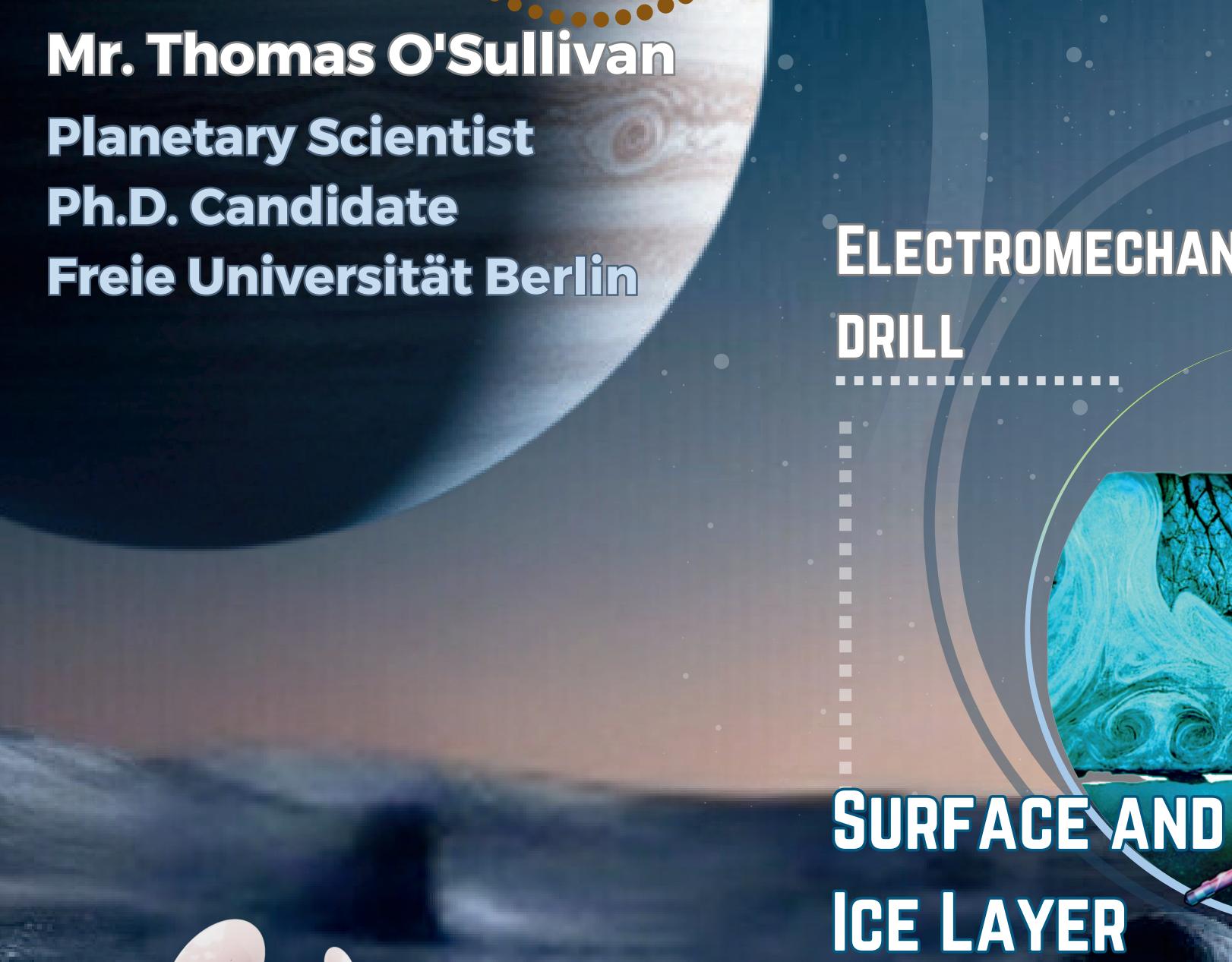
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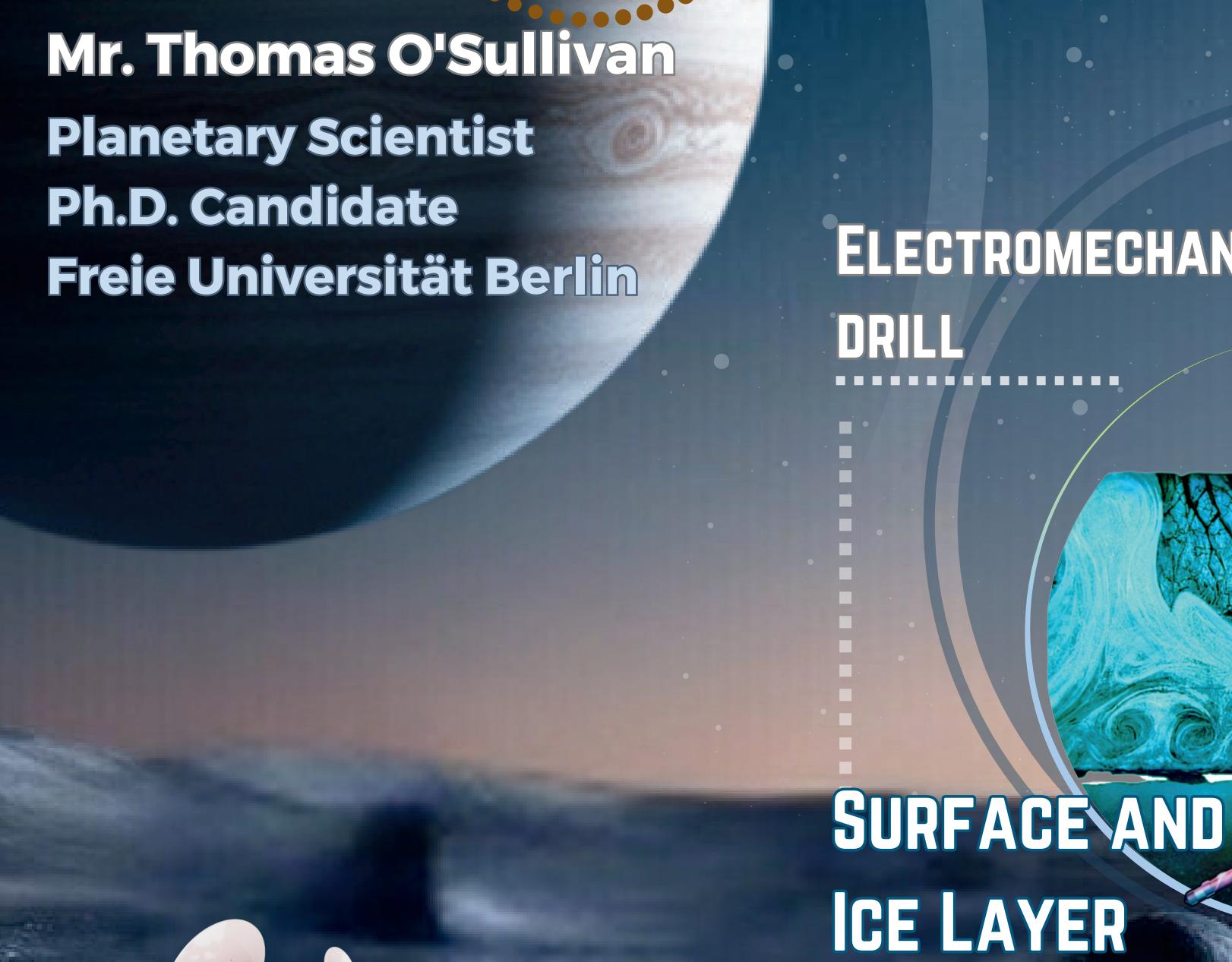
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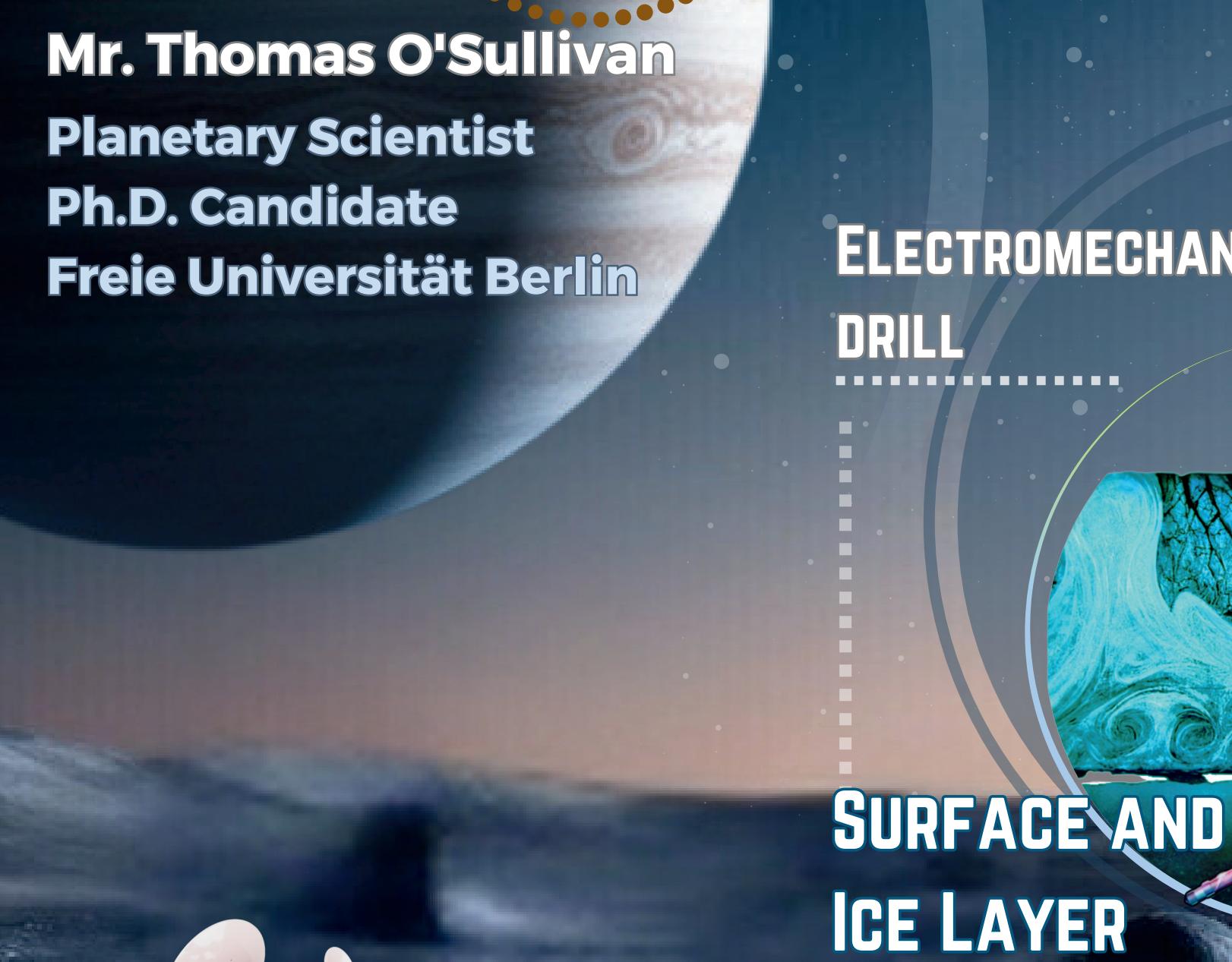
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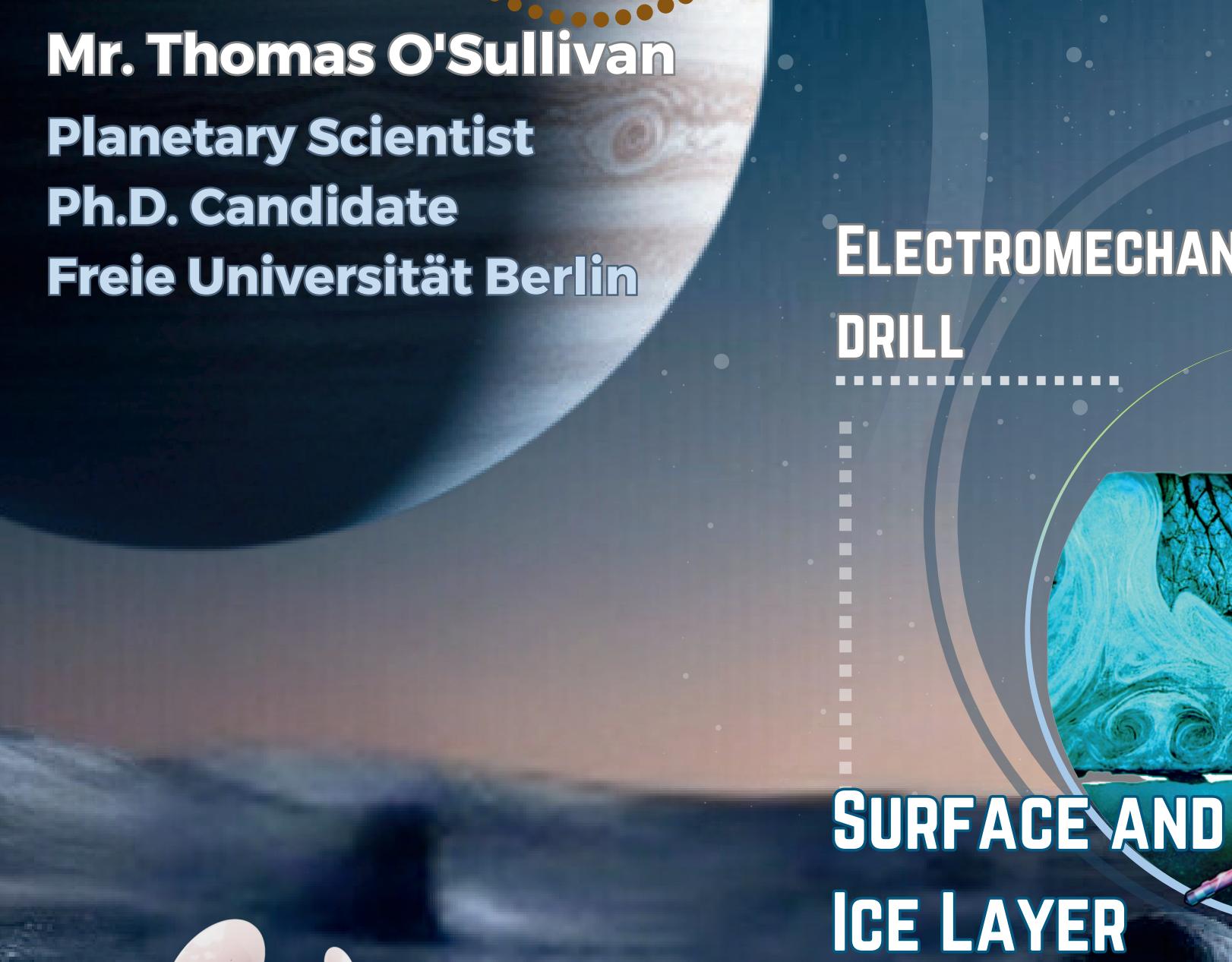
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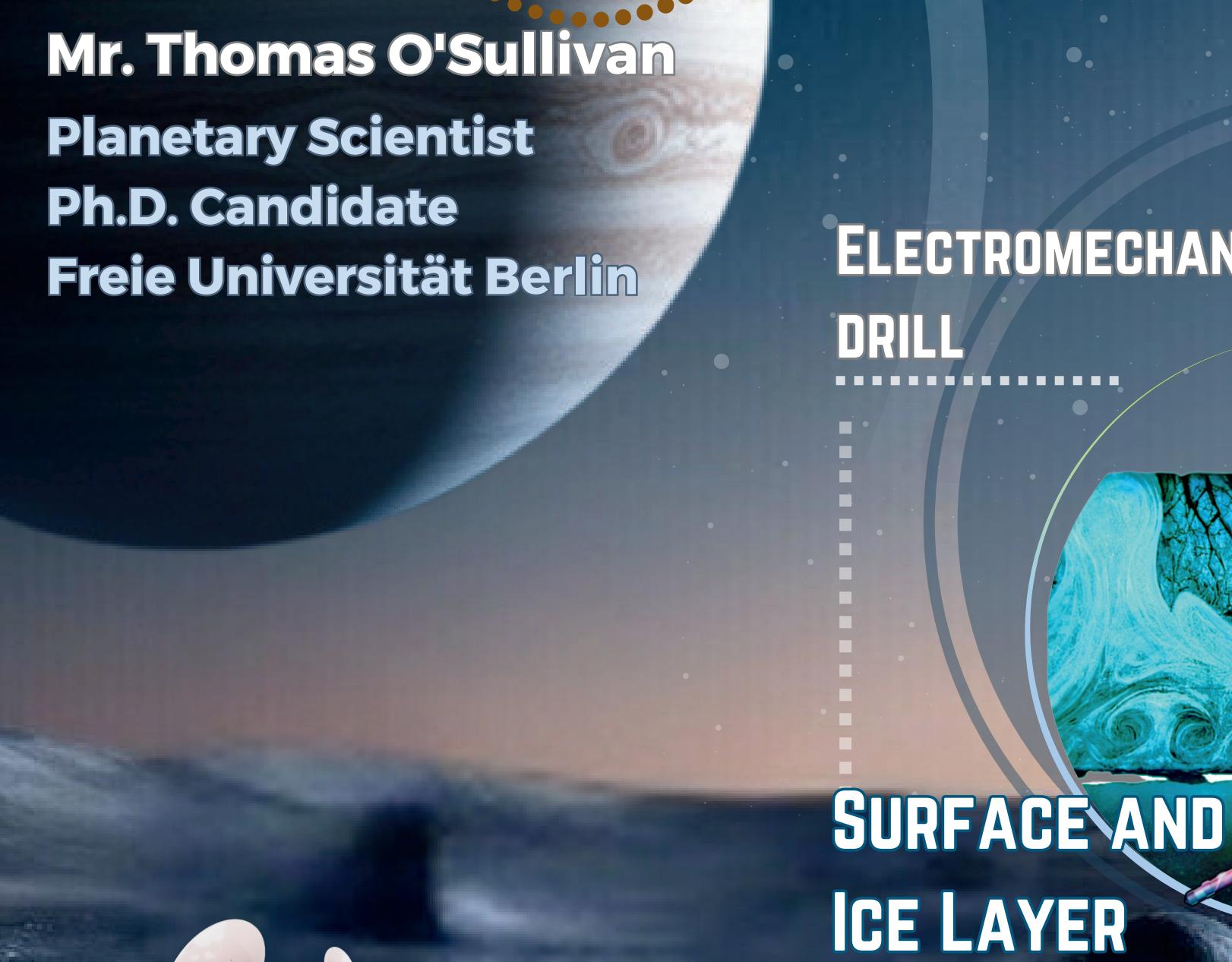
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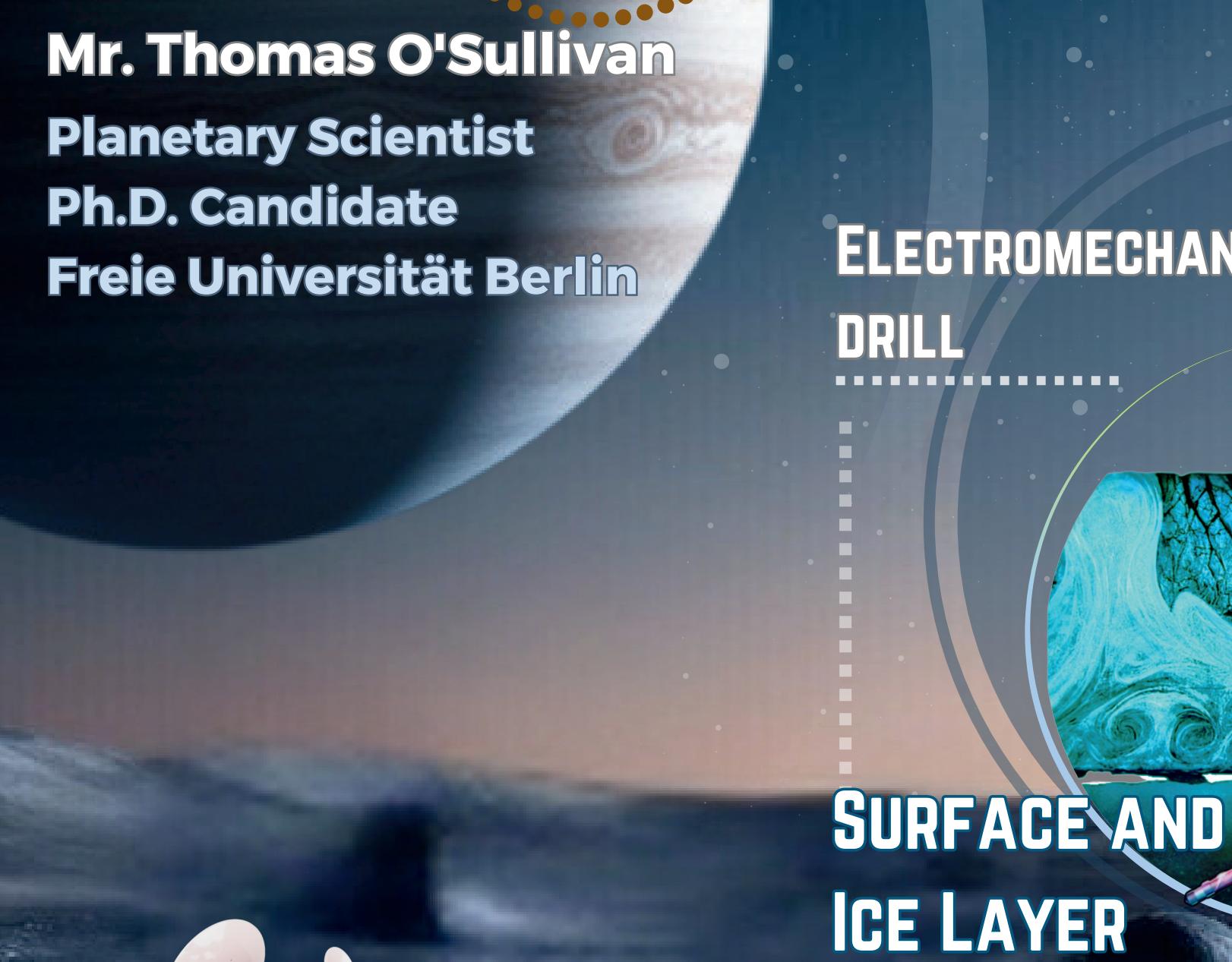
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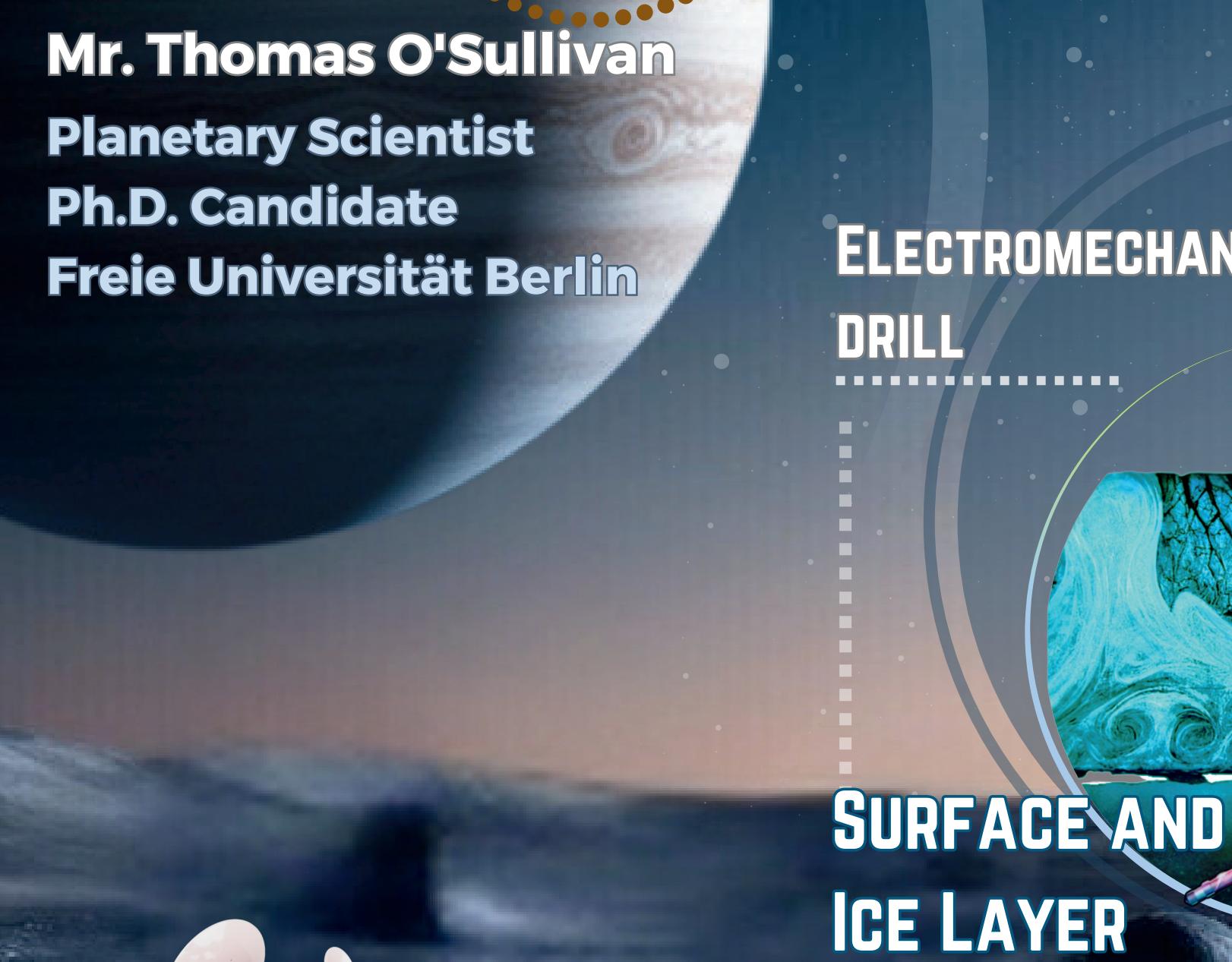
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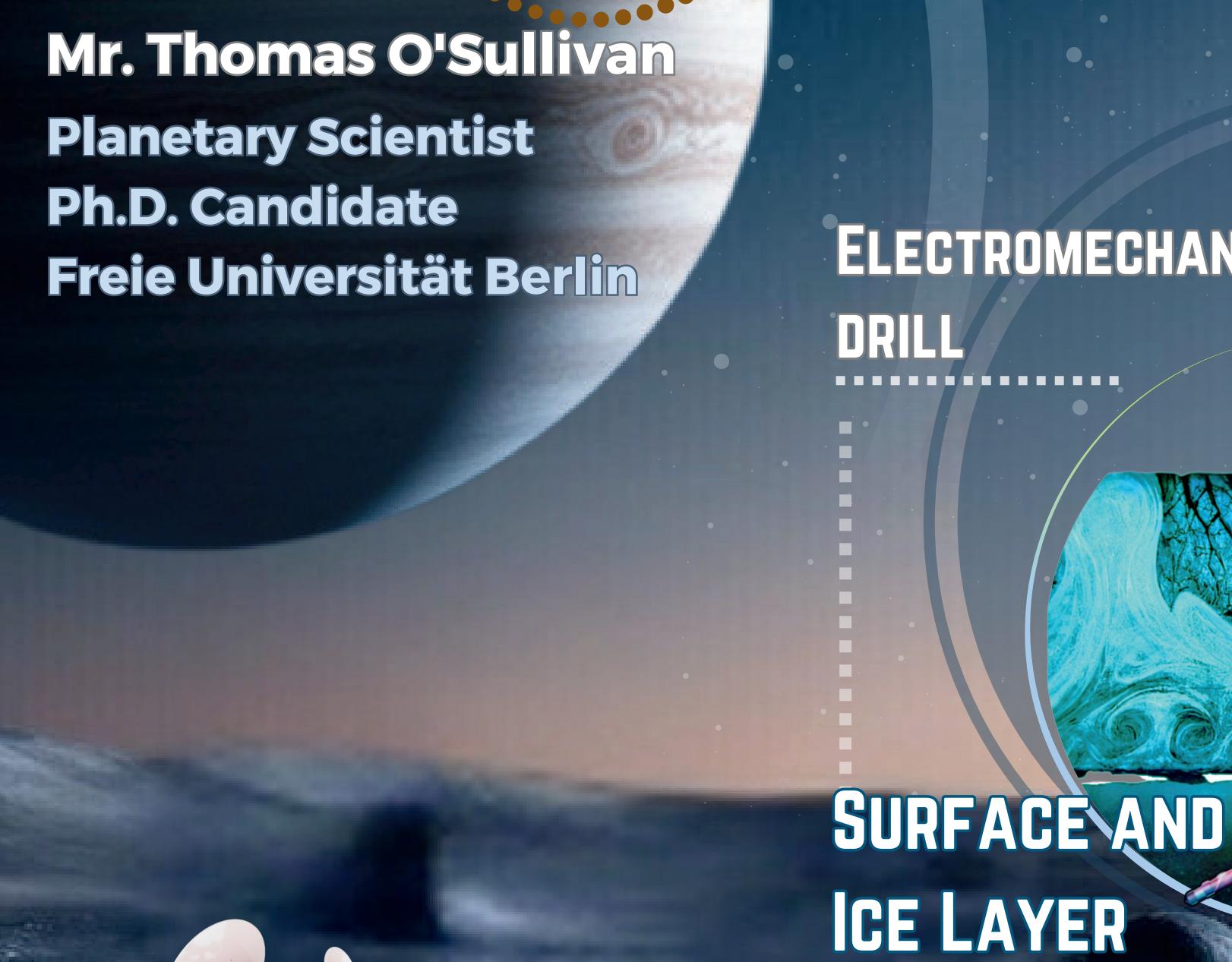
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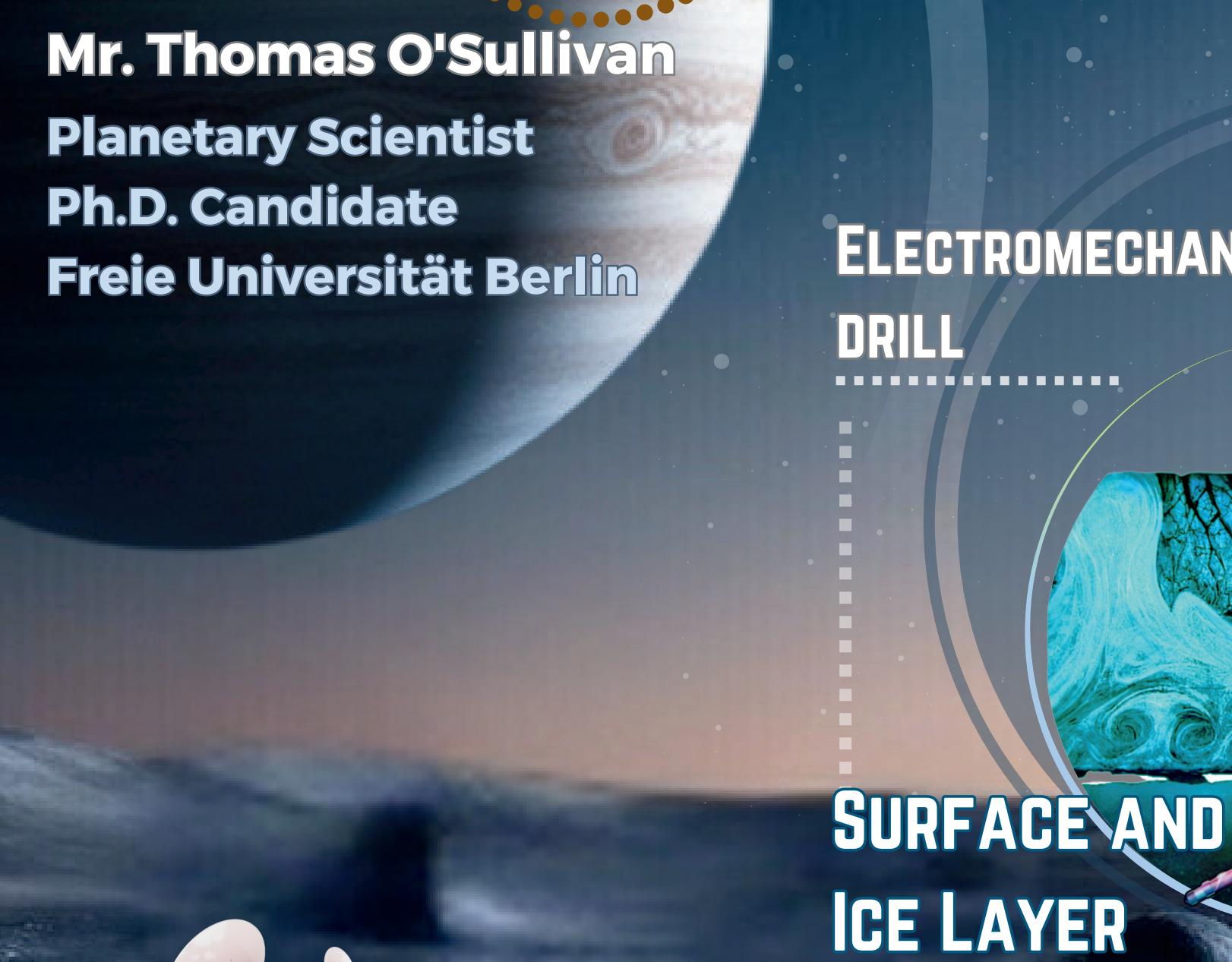
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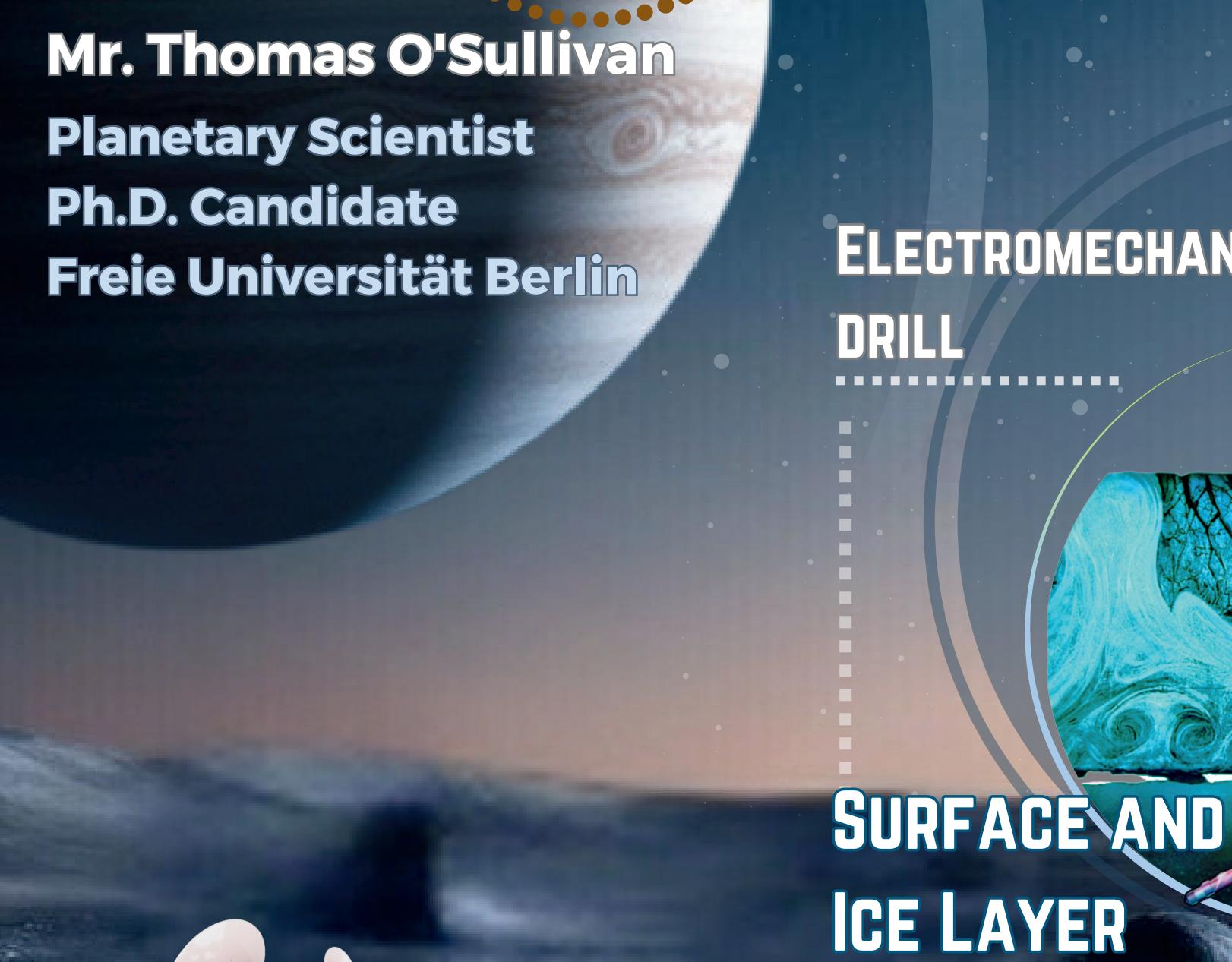
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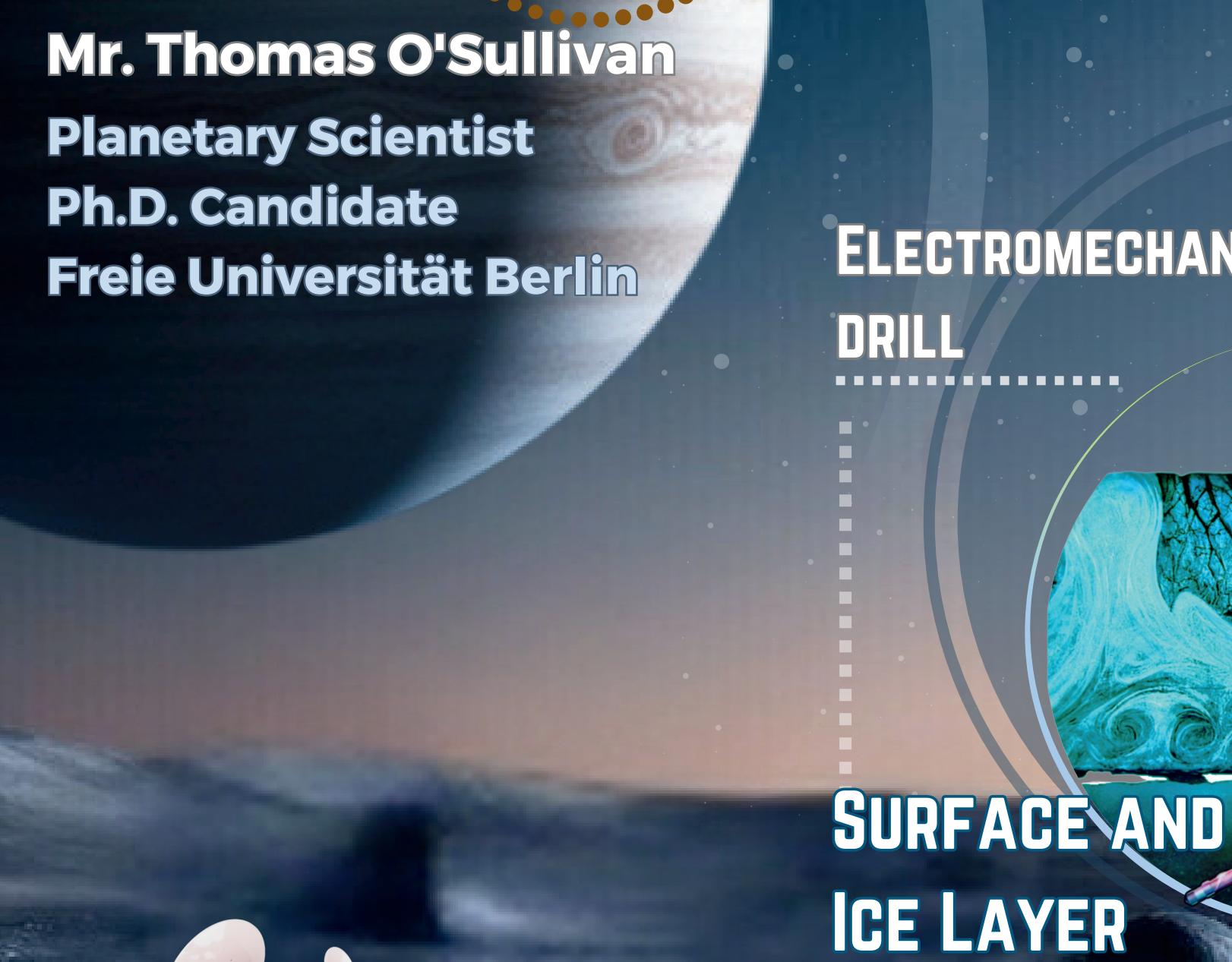
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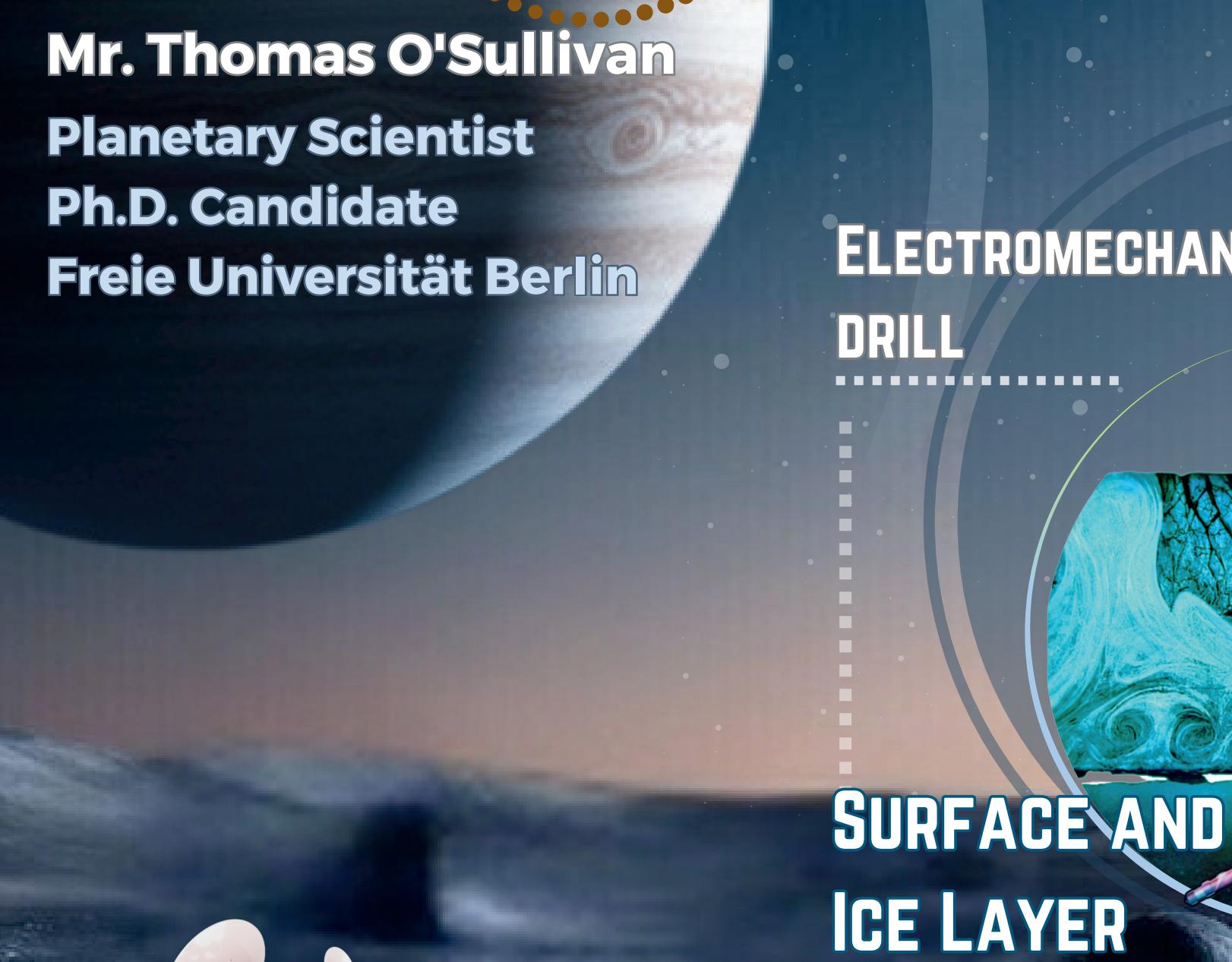
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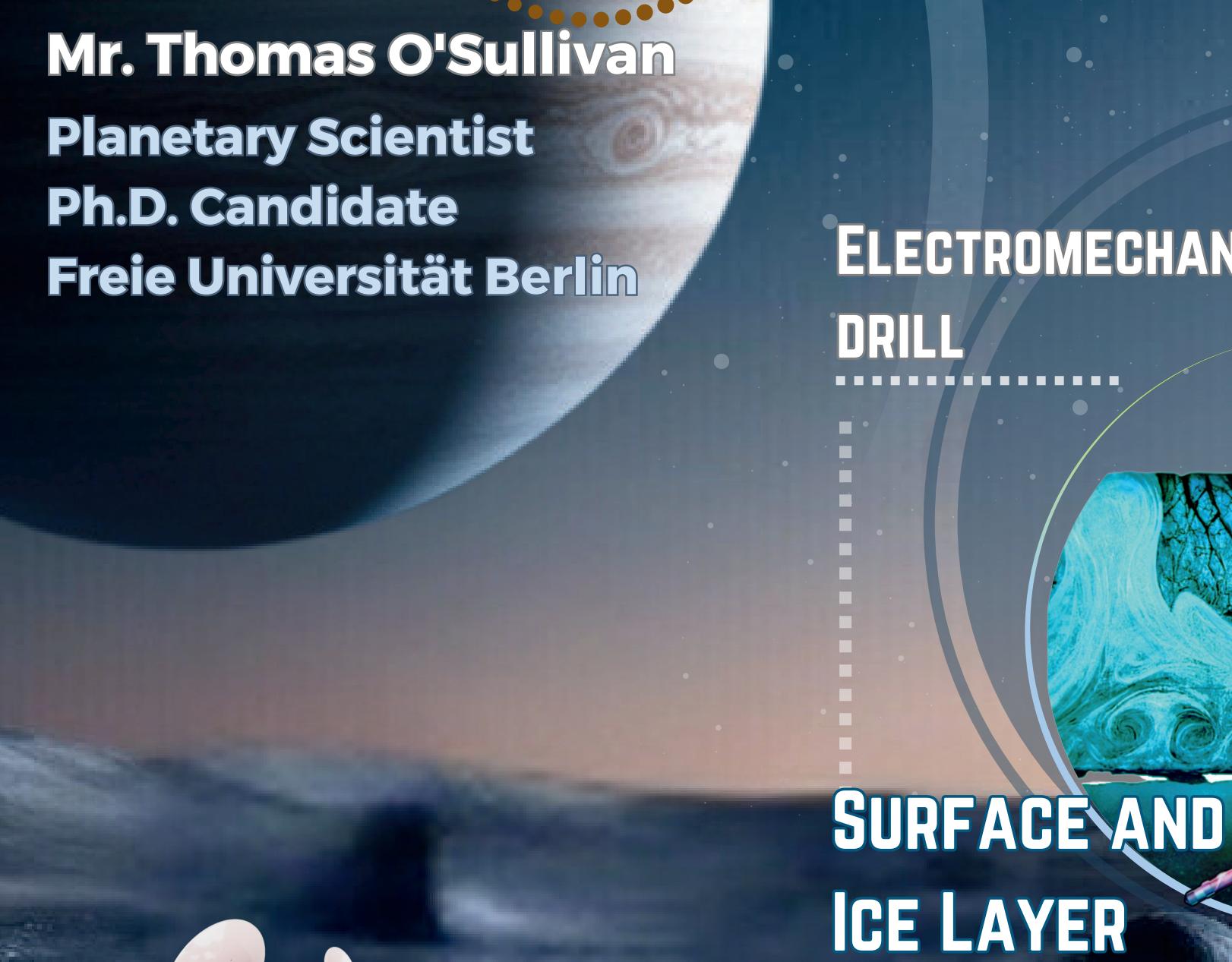
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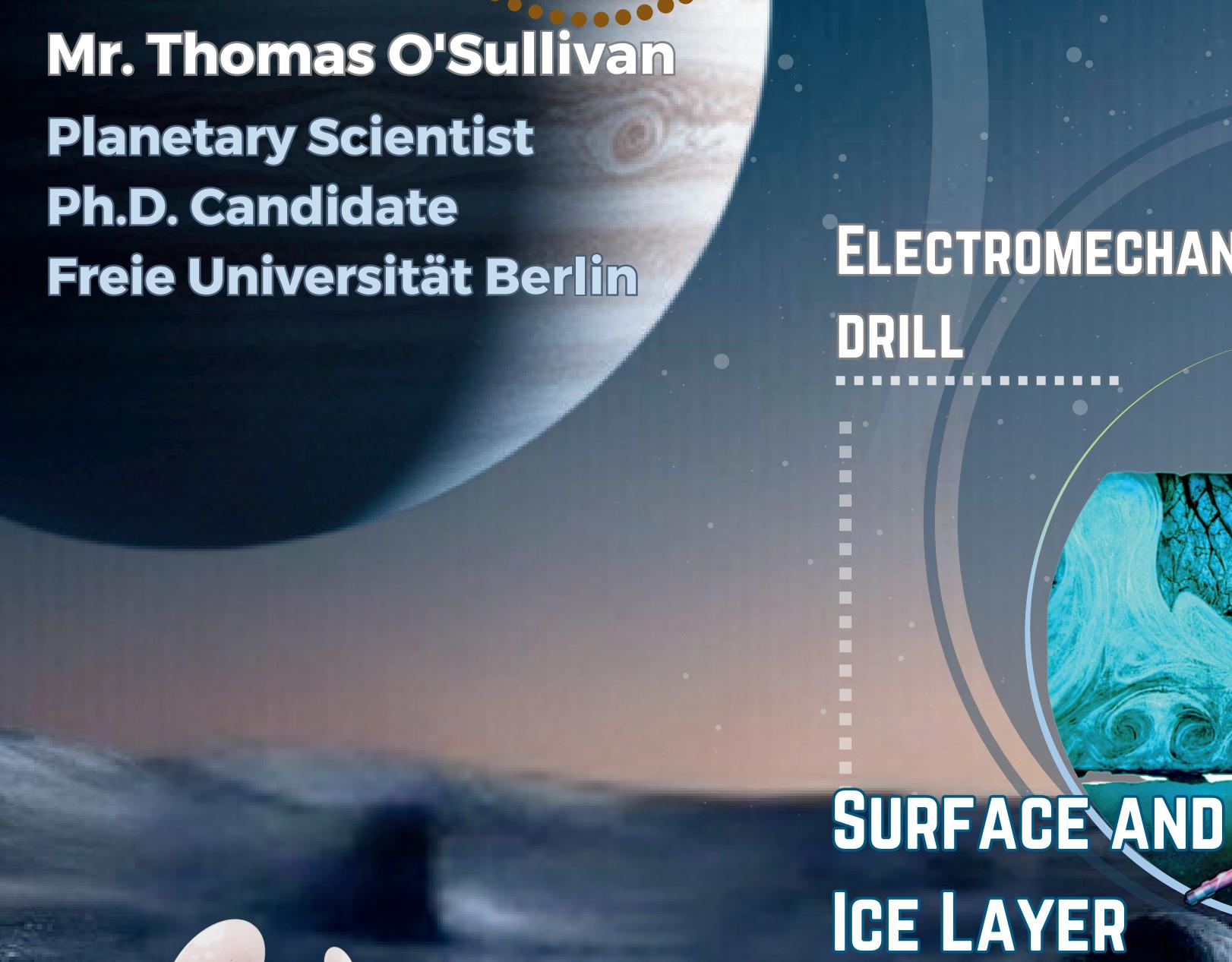
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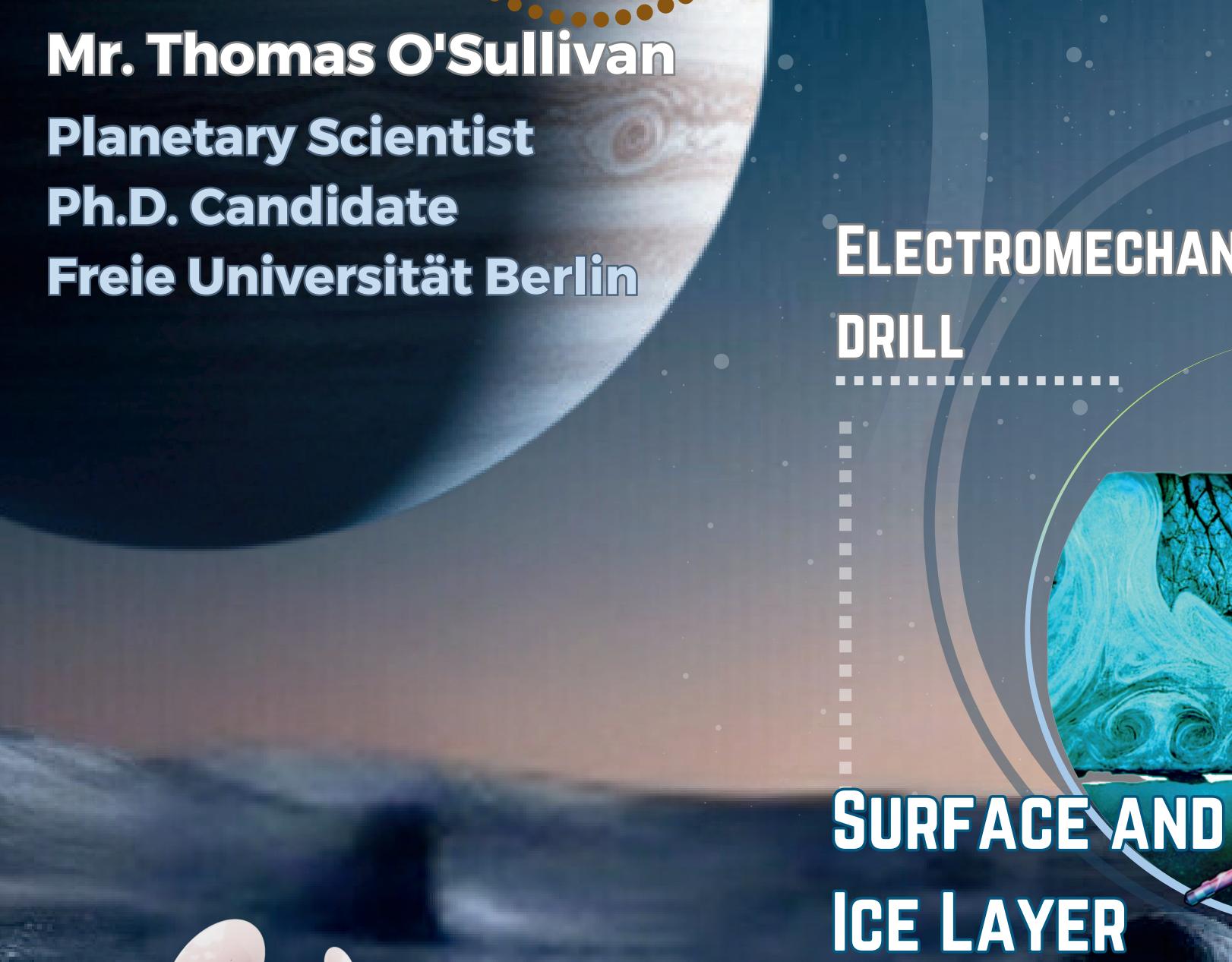
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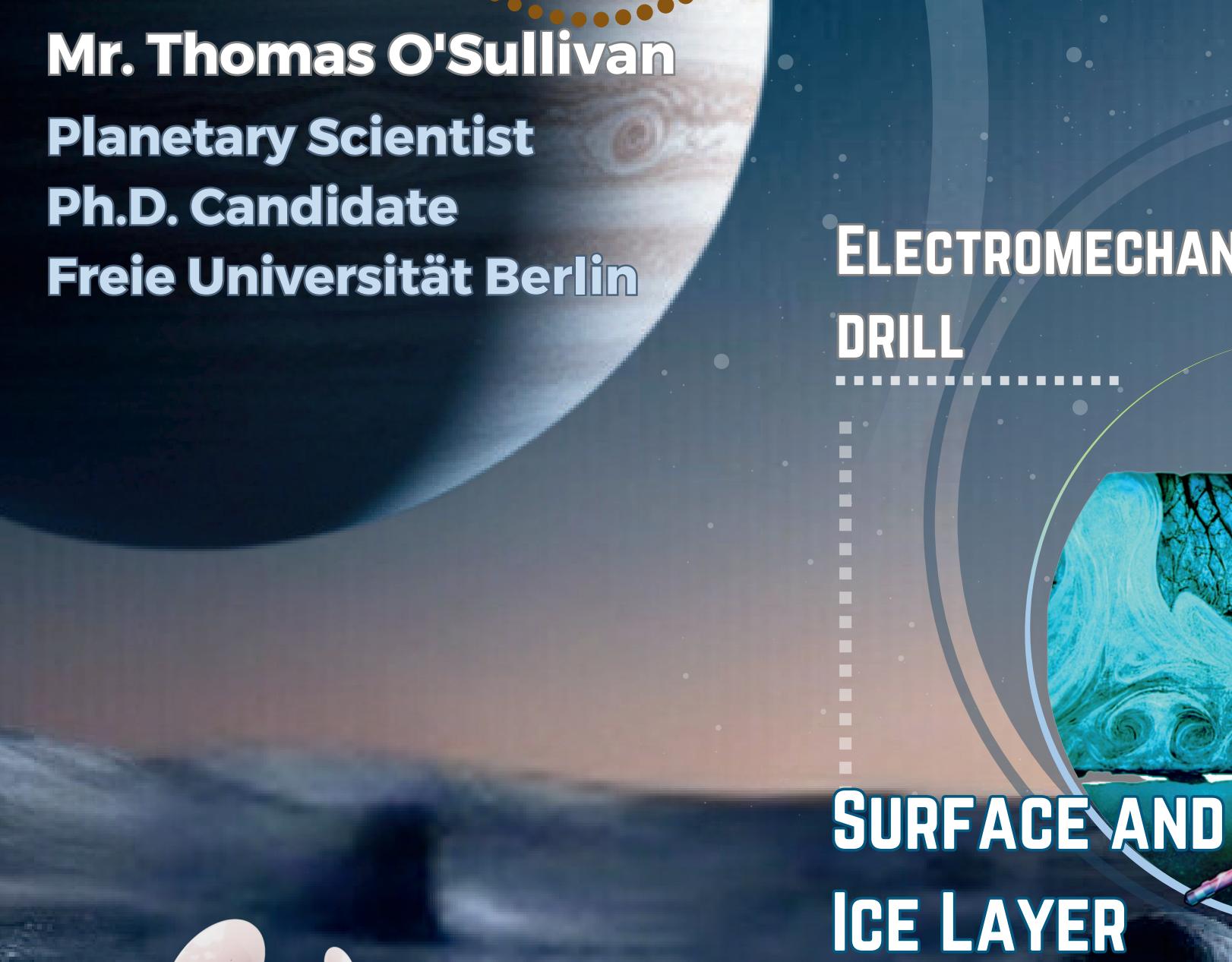
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