



# MIT ChemE

## Spring 2025 Seminars

# A Multiscale Systems Approach to Atomic-Scale Low-Temperature Plasma Processes



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**Friday, April 4, 2025 - 3:00pm, 66-110**

Ali Mesbah is Associate Professor of Chemical and Biomolecular Engineering at the University of California at Berkeley. Before joining UC Berkeley, Dr. Mesbah was a senior postdoctoral associate at MIT. He holds a Ph.D. degree in Systems and Control and a Master's degree in Chemical Engineering, both from Delft University of Technology. Dr. Mesbah is a senior member of the IEEE and AIChE. He serves on the Editorial Boards of the IEEE Transactions on Control Systems Technology, IEEE Control Systems Letters, and IEEE Transactions on Radiation and Plasma Medical Sciences. Dr. Mesbah is recipient of the O. Hugo Schuck Best Paper Award in 2024, the Alexander von Humboldt Research Award in 2023, the Best Application Paper Award of the IFAC World Congress in 2020, the AIChE's 35 Under 35 Award in 2017, the IEEE Control Systems Outstanding Paper Award in 2017, and the AIChE CAST W. David Smith, Jr. Publication Award in 2015. His research interests lie at the intersection of optimal control, machine learning, and applied mathematics, with applications to learning-based analysis, optimization, and predictive control of materials processing and manufacturing systems.

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