# Professors Stacy Copp and Thomas Scaffidi receive DOE Early Career Research Program awards

The awards will support research into quantum science and nanoscale materials.
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UC Irvine Professors Stacy Copp and Thomas Scaffidi.

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Professors Thomas Scaffidi of the Department of Physics & Astronomy and Stacy Copp of Material's Science and Engineering and the Departments of Physics & Astronomy and Chemistry were awarded Early Career Research Program (ECRP) awards from the U.S. Department of Energy. The award goes to untenured scientists at the start of their careers who demonstrate outstanding promise for making field-defining discoveries. Copp's funded project proposal details research she and her lab are doing to investigate a new class of nanoscale materials that could mimic the light-harvesting abilities of plants and other organisms. "This fundamental scientific study of energy transfer processes in nanocluster materials is motivated by the urgent need for cleaner, more efficient ways to harness the sun's energy," said Copp, whose primary faculty appointment is in the UC Irvine Samueli School of Engineering. Meanwhile, Scaffidi's lab draws inspiration from the way water flows to understand and harness the quantum dynamics of electrons in novel materials. "This research is exciting because it connects fundamental physics with practical applications, enabling us to gain deeper insights into quantum materials," said Scaffidi. "By developing new theoretical frameworks, we can better understand and improve the transport properties of strongly correlated materials, which could lead to advancements in low-energy electronics and related technologies."

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