Topological Insulators in Electromagnetic Systems Justin Cole

Topological insulators are systems that allow the flow of energy, e.g. light, along the boundary of a medium, but forbid it in the interior or bulk. Moreover, these so-called edge states are exceptionally robust to material defects. Less than two decades ago topological insulators were theoretically proposed and experimentally realized in electromagnetic systems. This talk will introduce the fundamental principles and models used to describe these systems. Experimental realizations and potential applications will be discussed.