

Title:

Recent advancements in nanoscale light-vapor interactions on a chip

Abstract:

In this talk I will describe our recent results related to the chip scale integration of atomic vapors on a chip. Following a brief introduction and discussion regarding the platform of atomic cladded waveguides (ACWG) and atom-plasmon interactions, I will discuss advanced effects such as coherent and non-coherent nonlinear interactions, cavity enhanced optical switching, and weak vs. strong coupling. I will also discuss some potential applications.