

Physics Seminar: Lorenzo Di Pietro  
Wednesday, February 26 · 2:00 – 3:00pm

Location: 313

Title: Exploring Confinement in Anti-de Sitter Space

Abstract: Based on 2407.06268 with R. Ciccone, F. De Cesare and M. Serone and 2312.09277 with C. Copetti, Z. Ji and S. Komatsu. We consider four-dimensional Yang-Mills theory in AdS space. Mass gap and confinement in flat space imply that the Dirichlet boundary condition must disappear when the radius is large. Based on the analogy with 2d toy models solvable at large  $N$ , we propose merger and annihilation as the most likely scenario for this disappearance. This is also suggested by perturbative calculations in 4d.