

Tuesday, October 18 @ 4:00 PM

Physics & Astronomy Building (PAB) 4-330

Five-dimensional gauge theory via holography

Eric D'Hoker (UCLA)

String theory and brane dynamics suggest the existence of five-dimensional superconformal fixed points which are gauge theories without Lagrangian description. Holography offers a perspective on these mysterious theories when the gauge group has high rank. In this talk, I will construct exact Type IIB supergravity solutions with 16 conformal supersymmetries and space-time of the form $\text{AdS}_6 \times S^2$ warped over a Riemann surface Σ with boundary, and relate the structure of these solutions to five-dimensional gauge dynamics.