



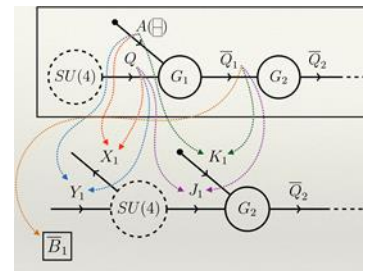
Laboratory for Elementary Particle  
Physics (LEPP)  
**Theory Seminar**

# S-Confining Product Gauge Groups and Composite Axions



A class of  $SU(N)$  product gauge groups confine without breaking chiral symmetry. Each of these models has a quantum-modified moduli space which is described by a minimal set of gauge-invariant operators and a dynamically generated superpotential. Composite models of this type are particularly adept at protecting global symmetries: as an example, we describe a new composite axion model where the Peccei-Quinn symmetry is protected to arbitrary order.

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**Wednesday September 20th, 2017**  
**2:00pm**  
*401 Physical Sciences Building*