



## Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

**Dienstag, 30.11.2021**

18 Uhr, virtuelles Meeting mit  
[Zoom](#)

**Meeting ID: 699 9726 9389**

**Passwort: 81505154**

**Prof. Nitya Kitchloo**  
(Johns Hopkins University)

**Symmetry breaking and homotopy types for Link homologies**

**Abstract:**

I will show how one may construct equivariant homotopy types by representing knots and links in the space of principal  $U(r)$  connections on a marked circle. These homotopy types admits a natural local system with the Affine Grassmannian as structure group, allowing us to apply twisted equivariant cohomology to our construction. We will see how this recovers several link homology theories like the triply graded link homology of Khovanov and Rozansky, the  $sl(n)$  link homomology, as well as several spectral sequences of link homologies running between these theories.

**Vor dem Vortrag wird der Raum um 17:40 Uhr für Gespräche geöffnet.**