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## Oberseminar Dynamische Systeme

### Equivariant transversality for holomorphic curves

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16:15 Uhr – Raum IA 1/53

**Michael Rothgang**  
**(Berlin-Humboldt)**

#### Abstract:

We study closed holomorphic curves in symplectic  $G$ -manifolds, with respect to a  $G$ -equivariant almost complex structure. We should not expect the moduli space of such curves to be a manifold (after all, transversality and symmetry are famously incompatible). However, we can hope for a clean intersection condition: the moduli space decomposes into disjoint strata which are smooth manifolds; the dimensions of the strata are explicitly computable.

I'll present this decomposition for simple curves and indicate how to extend this to multiple covers. These are the first steps towards a well-behaved theory of equivariant holomorphic curves.

Guests are very welcome!