Lehrstuhl für Algebra und Darstellungstheorie | Pontdriesch 10-16 | 52062 Aachen | GERMANY

# Fifth annual conference of the SFB-TRR 195

Wednesday, Sept 15, 11:30 am

## Jorge Alberto Olarte

### The tropical symplectic Grassmannian

The symplectic Grassmannian SpGr(k,2n) is the space of a all linear subspaces of dimension k of a vector space of dimension 2n which are isotropic with respect to a symplectic form. We look at several equivalent characterizations of isotropic linear subspaces and formulate a tropical analog for each, such as, for example, being in the tropicalization of the symplectic Grassmannian. It turns out that in the tropical world these characterizations are no longer equivalent and we will see exactly for which k and n does one characterization imply another. This is joint work with George Balla.