

Outline for the seminar and the speakers

Tentative topics for the talks: Please note that the list follows the order of the talks in our schedule.

- Symplectic geometry, [CG] 1.1-1.5. Approximately 2-2.5hrs. Speaker: Yaochen Wu.
 - Borel-Moore homology [CG] 2.6: basics of Borel-Moore homology: up to 2.6.23; results about smooth pullback, specialization, Thom isomorphism and excess intersection formula (Skip the proofs). Approx. 2-2.5hrs. Speaker: Mengwei Hu.
 - Semisimple alg, flag varieties and the nilpotent cone, [CG] 3.1 and 3.2. Approx. 2.5-3hrs. Speaker: Alvaro Martinez
 - Steinberg variety, [CG] 3.3. Speaker: Xuan Trung Vu (Trung)
 - Convolution in Borel Moore homology: basics of convolution: up to 2.7.19; base change and specialization, convolution of conormal bundles (Skip the proofs in these part); the convolution algebra- after 2.7.40. Approx. 2-2.5hrs. Speaker: Misha Goltsblat.
 - Steinberg variety and lagrangian constructions of Weyl groups, [CG] 3.3 and 3.4, Approx. 2.5-3hrs. Speaker: Xuan Trung Vu (Trung)
 - Representation of Weyl groups from geometric aspects, [CG] 3.5 and 3.6, Approx. 2.5-3hrs. Speaker: Fan Zhou
- CG chap 5. Basics in equivariant K theory and theorems in use. Approx. 4.5-5hrs. Speaker: Do Kien Hoang (+1 ?)
- CG 6.1-6.2, Equivariant K groups of the flag varieties and the Steinberg varieties. Approx 3hrs. Speaker: Yaochen Wu

The main reference here is the book "Representation theory and complex geometry" by Chriss and Ginzburg.