

RTG Seminar Winter 25 Outline

January 28, 2025

1. February 3: Introduction **Kartik**
2. February 10: Classical Theta correspondence (§2.1 and §2.2) **Yusheng**
3. February 17: Siegel-Weil formula and Rallis inner product formula (§2.3 and §2.4) **Jialiang**
4. February 24: Theta dichotomy (§2.5) **Elad**
5. March 10: Unitary Shimura varieties (§3.1) **Calvin**
6. March 17: Special cycles and generating functions of special cycles (§3.2 and §3.3)
7. March 24: Geometric modularity, geometric theta lifting and Kudla-Millson theory (§3.4 and §3.5)
8. March 31: Geometric Siegel-Weil and geometric inner product formula (§3.6 and §3.7) **Pam**
9. April 7: Arithmetic modularity and special cycles on integral models (§4.1 and §4.2) **Alex Bauman**
10. April 14: Modularity in arithmetic Chow groups (§4.3)
11. April 21: Arithmetic Siegel-Weil (§4.4)
12. April 28: Arithmetic inner product formula (§4.5)