# NEW DEVELOPMENTS IN ARITHMETIC GEOMETRY

**Organizer:** Ye Tian (Chinese Academy of Sciences), Shou–Wu Zhang (Princeton and Tsinghua)

**Address:** Conference Hall 322, Science Building, Tsinghua University

## Thursday, June 14

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|---|---|
| 9:30–10:30 | **Dorian Goldfeld** (Columbia University)<br>*Orthogonality relations for the Fourier coefficients of GL(n) cusp forms* |
| 11:00–12:00 | **Hang Xue** (University of Arizona)<br>*$\epsilon$-dichotomy for linear models* |
| 2:30–3:30 | **Winnie Li** (U. Penn)<br>*Noncongruence modular forms: advances and challenges* |
| 4:00–5:00 | **Will Chen** (IAS, Princeton)<br>*Noncongruence subgroups of SL(2,$\mathbb{Z}$) and nonabelian level structures for elliptic curves* |

## Friday, June15

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| 9:30–10:30 | **Wei Zhang** (Columbia and MIT)<br>*Selmer groups for Rankin-Selberg L-functions of GL(2)×GL(3)* |
| 11:00–12:00 | **Xin Wan** (Chinese Academy of Sciences)<br>*BSD formula for elliptic curves and modular forms* |

## Saturday, June16

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| 9:30–10:30 | **Xinyi Yuan** (UC Berkeley)<br>*Positivity of Hodge bundles of abelian varieties* |
| 11:00–12:00 | **Xuhua He** (University of Maryland)<br>*Some results on affine Deligne-Lusztig varieties* |
| 2:30–3:30 | **Ruochuan Liu** (Beijing University)<br>*Towards a p-adic Riemann-Hilbert correspondence* |
| 4:00–5:00 | **Yongquan Hu** (Chinese Academy of Sciences)<br>*Asymptotic growth of the cohomology of Bianchi groups* |

## Sunday, June17

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| 9:30–10:30 | **Alex Smith** (Harvard University)<br>*$2^k$-Selmer groups, $2^k$-class groups, and Goldfeld's conjecture* |
| 11:00–12:00 | **Weizhe Zheng** (Chinese Academy of Sciences)<br>*Compatible systems along the boundary* |