杭州几何会议（2019 年 8 月 8 日，数学中心 201）

上午
9:00--9:40 李逸（东南大学）
题目: Scalar curvature along Ricci-type flows
摘要: In this talk I report recent works on the behavior of the scalar curvature along Ricci flow, Kahler-Ricci flow coupled with (1,1)-forms, and G2 flow, respectively.

9:50--10:30 万建明（西北大学）
题目: An extension of Bonnet–Myers theorem
摘要: We give a complementary generalization of the extensions of Bonnet–Myers theorem obtained by Calabi and also Cheeger–Gromov–Taylor.

10:40--11:20 杨森（东南大学）
题目: K-theory, local cohomology and tangent spaces to Hilbert schemes
摘要: By using Thomason-Trobaugh non-connective K-theory, we construct a map from tangent spaces to Hilbert schemes to local cohomology groups
$\pi : T\_Y \mathrm{Hilb}^p(X) \dashrightarrow H\_y^p(\Omega\_{X/Q}^{p-1})$.
And we use this map π to answer affirmatively(after slight modification) a question by Mark Green and Phillip Griffiths on constructing a map from tangent spaces to Hilbert scheme $T\_Y \mathrm{Hilb}^p(X)$ to those to the cycle group $TZ^p(X)$.

下午
2:00--2:40 李平（同济大学）
题目: The rigidity on the second fundamental form of projective manifolds
摘要: We review some known gap phenomena related to the second fundamental form of
the minimal submanfolds and complex submanifolds in the unit spheres and complex projective spaces respectively, and then present our recent progress on them.

2:50--3:30 沈洋（南京大学）
题目: Moduli spaces as ball quotients, local theory
摘要: The moduli space of cubic surfaces is studied by Allcock, Carlson and Toledo. By studying the compactifications of the moduli spaces and the corresponding points in the period domain, they proved the global Torelli theorem for cubic surfaces. Moreover, they showed that the moduli space of stable cubic surfaces can be realized as a ball quotient. Several years later, they also proved similar results for cubic threefolds. Recently, we give a Hodge theoretic criterion to characterize   locally the moduli spaces of certain projective manifolds to be complex balls, which is a generalization of their work. Therefore their moduli spaces are complex balls under global Torelli theorem. This is a joint work with Professor Kefeng Liu.

3:40--4:20 庄晓波（浙江理工大学）
题目: Tautological integrals on Grassmannians of type B,C,D
摘要: By using Atiyah-Bott localization on Grassmannians G/P, we will deduce a formula for computing tautological integrals on G/P by residues.