

ミニワークショップのお知らせ

日時：2017年2月7日（火曜日）

場所：川井ホール（数理科学記念館）

10:30-11:30 梶ヶ谷徹（産総研・東北大数理先端材料モデリングオープンイノベーション
ラボラトリ(MathAM-OIL)PD)

Title: Reductions of minimal Lagrangian submanifolds with symmetries

Abstract: We give a Hsiang-Lawson type theorem for minimal Lagrangian submanifolds in a Kahler manifold. More precisely, we show the minimality of a K -invariant Lagrangian submanifold L in a Fano manifold M w.r.t. a globally conformal Kahler metric is equivalent to the minimality of the reduced Lagrangian submanifold $L_0=L/K$ in a Kahler quotient w.r.t. the Hsiang-Lawson metric. Furthermore, we give some examples of Kahler reductions by using a circle action obtained from a homogeneity one action on a Kahler-Einstein manifold of positive Ricci curvature. Applying these results, we give many examples of minimal Lagrangian submanifolds via reductions.

13:30-14:30 大仁田義裕（大阪市大, OCAMI）

Title: On Floer homology of the Gauss images of isoparametric hyper surfaces

Abstract: Recently we used the Floer homology and the lifted Floer homology for monotone Lagrangian submanifolds in order to study their Hamiltonian non-displaceability

(H. Iriyeh, H. Ma, R. Miyaoka and Y. Ohnita,

Hamiltonian non-displaceability of Gauss images of isoparametric hyper surfaces,

Bull. London Math. Soc. (2016) 48 (5): 802-812).

In this talk, I would like to explain the spectral sequences for the Floer homology and the lifted Floer homology of monotone Lagrangian submanifolds and their applications to the Gauss images of isoparametric hypersurfaces, which are the main technical part in our joint work.

Moreover I will suggest some related open problems for the further research.

15:00-16:00 (幾何セミナーも川井ホールで行います。)

Z.Z.Tang (Chern Institute of Mathematics, 北京師範大学)

Title: Recent progress in isoparametric foliation

Abstract: The talk will give a survey on our recent works on isoparametric foliation and its several applications(e.g. eigenvalue estimate of laplacian), based on the joint work with [J.Q.Ge](#), C.Qian and W.J. Yan.

18:00- 歓迎会