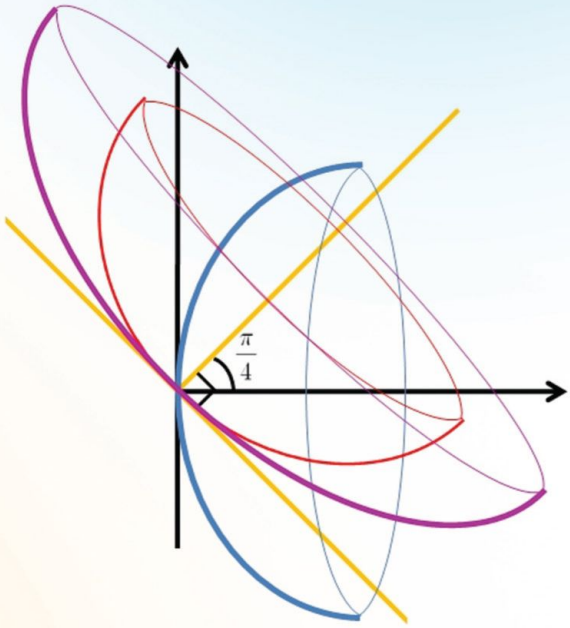
http://open.nims.re.kr/events/16thDiff.Geometry

2012 NIMS Hot Topics Workshop on

The 16th International Workshop on Differential Geometry

and The 5th KNUGRG-OCAMI Differential Geometry Workshop



- **Date** : 31(Wed) October - 3(Sat) November, 2012
- **Place** : Faculty Seminar Room #219, College of Natural Sciences
  Kyungpook National University, Daegu 702-701, Korea

- **Organizing Committee**
  - Prof. Young Jin Suh (Kyungpook Nat'l Univ.)
  - Prof. Jürgen Berndt (Kings College London)
  - Prof. Yoshihiro Ohnita (Osaka City Univ. & OCAMI)
  - Prof. Byung Hak Kim (Kyung Hee Univ.)
  - Dr. Hyunjin Lee (Kyungpook Nat'l Univ.)

- **Invited Speakers**
  - Prof. Jürgen Berndt (King's College of London)
  - Prof. Jose Carlos Díaz-Ramos (Univ. of Santiago de Compostela)
  - Prof. Óscar Jesus Garay (Univ. of the Basque Country)
  - Prof. Makoto Kimura (Ibaraki Univ.)
  - Prof. Reiko Miyaoka (Tohoku Univ.)
  - Prof. Yoshihiro Ohnita (Osaka City Univ. & OCAMI)
  - Prof. Juan de Dios Pérez (Univ. of Granada)
  - Prof. Takashi Sakai (Tokyo Metropolitan Univ.)
  - Prof. Makiko Sumi Tanaka (Tokyo Univ. of Science)
  - Prof. Jiazu Zhou (Southwest Univ.)
  - Prof. Yong Seung Cho (Ewha Womans Univ.)
  - Prof. Sung-Eun Koh (Konkuk Univ.)
  - Prof. Jongil Park (Seoul Nat'l Univ.)
  - Prof. Seung Dal Jung (Jeju Nat'l Univ.)
  - Prof. Sungho Park (Hankuk Univ. of Foreign Studies)
  - Prof. Keomkyo Seo (Sookmyung Women's Univ.)
  - Dr. Hyunsuk Kang (KIAS)
  - Dr. Hojoo Lee (KIAS)
  - Dr. Imsoon Jeong (Kyungpook Nat'l Univ.)
  - Dr. Hyunjin Lee (Kyungpook Nat'l Univ.)

- **Organized by**
  National Institute for Mathematical Sciences
  & Grassmann Research Group

- **Supported by**
  National Institute for Mathematical Sciences (NIMS) 국가수리과학연구소 National Institute for Mathematical Sciences
  National Research Foundation of Korea (NRF) NRF 한국연구재단
  Daegu Convention & Visitors Bureau (DCVB) dcvb DAEGU Convention & Visitors Bureau

1 November (Thursday), 2012

09:00-11:00 Chair Professor Yoshihiro Ohnita

09:00-10:00 **Takashi Sakai** (Tokyo Metropolitan University, Japan)
Antipodal structure of the intersection of real forms in a complex flag manifold

10:00-11:00 **Jiazu Zhou** (Southwest University, China)
On algebraic integral geometric inequalities

11:00-12:30 Chair Professor Byung Hak Kim

11:00-12:00 **Makiko Sumi Tanaka** (Tokyo University of Science, Japan)
The intersection of two real forms in Hermitian symmetric spaces of compact type

12:00-12:30 **Welcome Address (Prof. Young Jin Suh)**
& Group Photo at Natural Science Building

12:30-14:00 **Lunch**

14:00-16:15 Chair Professor Reiko Miyaoka

14:00-14:30 **Hojoo Lee** (Korea Institute for Advanced Study)
Calabi's correspondence and its generalization

14:30-15:15 **Yong Seung Cho** (Ewha Womans University)
Quantum type cohomologies on almost contact metric manifolds

15:15-16:15 **Yoshihiro Ohnita** (Osaka City University & OCAMI, Japan)
Certain compact homogeneous Lagrangian submanifolds in Hermitian symmetric spaces

16:15-18:00 Chair Professor Jong Taek Cho

16:15-17:15 **Makoto Kimura** (Ibaraki University, Japan)
Real hypersurfaces with vanishing Hopf curvature in non-flat complex space forms

17:15-18:00 **Sung-Eun Koh** (Konkuk University)
Ruled minimal surfaces in three dimensional homogeneous manifolds

2 November (Friday), 2012

09:00-10:00 Chair Professor Jürgen Berndt

09:00-10:00 **Reiko Miyaoka** (Tohoku University, Japan)
Isoparametric hypersurfaces and moment map

10:00-11:00 Chair Professor Young Jin Suh

10:00-11:00 **Jongil Park** (Seoul National University)

Exotic smooth structures on 4-manifolds

11:00-17:00 **Private Discussions**

3 November (Saturday), 2012

09:00-10:30 Chair Professor Juan de Dios Pérez

09:00-10:00 **Jürgen Berndt*** (King's College London, United Kingdom)

Young Jin Suh (Kyungpook National University)

Real hypersurfaces in the complex quadric Ⅱ

10:00-10:30 **Sungho Park** (Hankuk University of Foreign Studies)

Capillary surfaces in 3-dimensional homogeneous spaces

10:30-12:00 Chair Professor Jose Carlos Díaz-Ramos

10:30-11:30 **Óscar Jesus Garay** (University of the Basque Country, Spain)

Riemannian submanifolds shaped by the bending energy and its allies

11:30-12:00 **Keomkyo Seo** (Sookmyung Women's University)

Geometric inequalities for submanifolds with bounded mean curvature

12:00-14:00 **Lunch**

14:00-15:30 Chair Professor Jiazu Zhou

14:00-14:30 **Seung Dal Jung** (Jeju National University)

Transverse Killing forms on a foliated Riemannian manifold

14:30-15:30 **Juan de Dios Pérez*** (Universidad de Granada, Spain)

Young Jin Suh (Kyungpook National University)

Generalized Tanaka-Webster connection on real hypersurfaces of complex projective space

15:30-17:00 Chair Professor Óscar Jesus Garay

15:30-16:30 **Jose Carlos Díaz-Ramos** (University of Santiago de Compostela, Spain)

Polar actions on complex space forms Ⅱ

16:30-17:00 **Hyunsuk Kang** (Korea Institute for Advanced Study)

Riemannian submersion and the eigenforms of the Witten Laplacian

Pre-Joint Meeting of The 16th International Workshop on Differential Geometry & Related Topics

31 October (Wednesday), 2012

11:00-12:00 Chair Professor Young Jin Suh

11:00-12:00 **Jose Carlos Díaz-Ramos** (University of Santiago de Compostela, Spain)
Polar actions on complex space forms I

12:00-14:00 Lunch

14:00-15:00 Chair Professor Óscar Jesus Garay

14:00-14:20 **Youngsuk Choi, Hyunjin Lee and Changhwa Woo*** (Kyungpook National University)
Hopf hypersurfaces in complex two-plane Grassmannians with Reeb parallel shape operator

14:20-14:40 **Carlos J.G. Machado, Juan de Dios Pérez** (Universidad de Granada, Spain)
Imsoon Jeong* and Young Jin Suh (Kyungpook National University)
***D*-parallelism of normal and structure Jacobi operators for hypersurfaces in complex two-plane Grassmannians**

14:40-15:00 **Hyunjin Lee* and Young Jin Suh** (Kyungpook National University)
Some weaker condition for parallel shape operator of Hopf hypersurfaces in complex two-plane Grassmannians

15:00-15:15 Break Time

15:15-17:30 Chair Professor Jose Carlos Díaz-Ramos

15:15-16:15 **Juan de Dios Pérez*** (Universidad de Granada, Spain)
Young Jin Suh (Kyungpook National University)
Generalized Tanaka-Webster connection on real hypersurfaces in complex two-plane Grassmannians

16:15-16:30 Break Time

16:30-17:30 **Jürgen Berndt*** (King's College London, United Kingdom)
Young Jin Suh (Kyungpook National University)
Real hypersurfaces in the complex quadric I

After Discussion

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