# The 22nd International Workshop on Differential Geometry of Submanifolds in Symmetric Spaces & Related Problems

- Date: July 31 (Wed) ~ August 5 (Mon), 2019
- **Place:** Education Room & Multi-purpose Room (KNU Library, 1st floor) & RIRCM (Global Plaza #1001), Kyungpook National University, Daegu 41566, Republic of Korea

#### Organizing Committee

Young Jin Suh (Chair, Kyungpook Nat'l University & RIRCM, Republic of Korea) Yoshihiro Ohnita (co-Chair, Osaka City University & OCAMI, Japan) Byung Hak Kim (co-Chair, Kyung Hee University, Republic of Korea) Imsoon Jeong (Pai Chai University, Republic of Korea) Changhwa Woo (Woosuk University, Republic of Korea)

#### Secretaries

Hyunjin Lee (RIRCM, Republic of Korea) Gyu Jong Kim (Woosuk University, Republic of Korea)

#### Supported by

National Research Foundation of Korea Japan Society for The Promotion of Science BK21PLUS

### Organized by

Kyung Hee University RIRCM (Research Institute of Real and Complex Manifolds) and OCAMI (Osaka City University Advanced Mathematical Institute)



National Research Foundation of Korea

KyungHee University







July 31 (We	ednesday), 2019 Place: Global Plaza (#1001)
14:00~15:30	Chair Prof. Byung Hak Kim
14:00~14:30	Real hypersurfaces of Type B in the complex quadric
	Hyunjin Lee* and Young Jin Suh (Kyungpook National University, Korea)
14:30~15:00	TBA
	Gyujong Kim* (Woosuk University, Korea) and Young Jin Suh (Kyungpook National University, Korea)
15:00~15:30	Real hypersurfaces in complex Grassmannians of rank two with $Q^{\perp}$ -parallel Ricci tensor
	Hyunjin Lee, Young Jin Suh (Kyungpook National University, Korea) and Changhwa Woo* (Woosuk University, Korea)
15:30~15:45	Break Time
15:45~17:15	Chair Prof. Imsoon Jeong
15:45~16:15	TBA
	Byung Hak Kim (Kyung Hee University, Korea)
16:15~16:45	Genus of a graph and its linear preserving operator
	LeRoy B. Beasley (Utah State University, USA) and Seok-Zun Song* (Jeju National University, Korea)
16:45~17:15	Para-real forms of para-Hermitian symmetric spaces
	Kyoji Sujigoto* (Tokyo University of Science, Japan) and Takuya Shimokawa (?????)
17:15~18:00	Discussions

August 1 (T	hursday), 2019 Place: Education Room & Multi-purpose Room		
09:20~10:10	Chair Prof. Byung Hak Kim		
09:20~10:00	Real hypersurfaces in the complex hyperbolic quadric and related topics		
	Young jin Suh (Kyungpook National University, Korea)		
10:00~10:10	Greeting & Opening Address		
10:10~12:50	Chair Prof. Yoshihiro Ohnita		
10:10~11:00	On Lorentzian manifolds with a type of linear connection		
	Uday Chand De* (University of Calcutta, India) and Young Jin Suh (Kyungpook National University, Korea)		
11:20~12:00	Real hypersurfaces in non-flat complex space forms and twistor spaces of complex 2-plane Grassmannian		
	Makoto Kimura (Ibaraki University, China)		
12:10~12:50	Superconnections and an intrinsic Gauss-Bonnet-Chern formula for Finsler manifolds		
	Huitao Feng* (Chern Institute of Mathematics & Nankai University, China) and Ming Li (Chongqing University of Technology, China)		
12:50~13:00	Group Photos		
13:00~14:30	Lunch Time (Global Plaza 2 <sup>nd</sup> floor, Restaurant of BIBIMGA)		
14:30~15:30	Chair Prof. Jurgen Berndt		
14:30~15:00	Collapsing theorem for regularized mean curvature flow and its application to Gauge theory		
	Naoyuki Koike (Tokyo University of Science, Japan)		
15:00~15:30	Maximal antipodal sets of $G_{\!2}$ and $G_{\!2}/SO(4)$ and related geometry		
	Makiko Tanaka* (Tokyo University of Science, Japan), Hiroyuki Tasaki (University of Tsukuba), and Osami Yasukura (University of Fukui, Japan)		
15:30~15:40	Break Time		
15:40~16:40	Chair Prof. Ljubica Velimirovic		
15:40~16:10	Antipodal sets of generalized s-manifolds		
	Shiniji Ohno* (Nihon University, Japan), Takashi Sakai (Tokyo Metropolitan University, Japan)		
	and Yasunori Terauchi (???)		
16:10~16:40	The Fischer-Marsden conjecture on the generalized Sasakian space forms		
	Sudhakar Kumar Chaubey* (Shinas College of Technology, Oman) and Uday Chand De (University of Calcutta, India)		
16:40~17:10	Discussions		
17:10~18:00	Chair Prof. Young Jin Suh		
17:10~18:00	Curvature and unknottedness		
	Jaigyoung Choe (Korea Institute for Advanced Study, Korea)		
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August 2 (F	riday), 2019 Place: Education Room & Multi-purpose Room
09:20~11:00	Chair Prof. Young Jin Suh
09:20~10:10	Contact hypersurfaces in Hermitian symmetric spaces (I)
	Jurgen Berndt (King's College London, UK)
10:20~11:00	Moment maps and isoparametric hypersufaces in spheres – some recent results
	Shinobu Fujii (Oshima College, Japan) and Hiroshi Tamaru* (Osaka City University, Japan)
11:00~11:10	Break Time
11:10~12:50	Chair Prof. Uday Chand De
11:10~11:50	CR geometry on real hypersurfaces of Kahler manifolds
	Jong Taek Cho (Chonnam National University, Korea)
12:00~12:50	Knot energy
	Ljubica S. Velimirovic* (University of Nis, Serbia), Marija Najdanovic (University of Pristina-Kosovska
	Mitrovica, Serbia), and Svetozar Rancic (University of Nis, Serbia)
12:50~13:00	Group Photos
13:00~14:10	Lunch Time
14:10~15:10	Chair Prof. Yoshihiro Ohnita
14:10~14:40	On Hamiltonian stable Lagrangian tori in complex hyperbolic spaces
	Toru Kajigaya (Tokyo Denki University, Japan)
14:40~15:10	ТВА
	Takayuki Okuda (Hiroshima University, Japan)
15:10~15:30	Break Time
15:30~16:30	Chair Prof. Huitao Feng
15:30~16:00	Canonical form theory in symmetric spaces
1600 1600	Osamu Ikawa (Kyoto Institute of Technology, Japan)
16:00~16:30	Certain weakly reflective submanifolds in compact Lie groups
16:30~16:40	Taro Kimura (Tsuruoka National College of Technology, Japan) Break Time
<b>16:40~18:00</b> 16:40~17:20	Chair Prof. Jurgen Berndt
10.40~17.20	Minimal Maslov number of <i>R</i> -spaces canonically embedded in Einstein-Kahler <i>C</i> -spaces
17:30~18:00	TBA Yoshihiro Ohnita (Osaka City University, Japan)
	Seungsu Hwang (Chung-Ang University, Korea)

## August 3 (Saturday), 2019

Place: Global Plaza (#1001)

10:30~12:30 Discussions in Hermitian symmetric spaces (I)

August 5 (Monday), 2019		Place: Global Plaza (#1001)
10:30~12:30		Chair Prof. Young Jin Suh
10:30~12:30	Contact hypersurfaces in Hermitian symmetric spaces (II)	
		Jurgen Berndt (King's College London, UK)
12:30~14:00	Lunch Time	
14:00~16:00	Discussions in Hermitian symmetric spaces (II)	