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Panel discussion organized by the Korean Mathematical Society

# Challenges and Difficulties for Mathematicians in Asia

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The Korean Mathematical Society

# Mathematics in Korea

# Mathematics in Korea at a Glance

## ■ Educational Infrastructure

- 192 four-year universities/colleges in Korea
- 124 schools have bachelor's degree programs in mathematics and/or mathematics education
- 61 universities have graduate programs awarding master's degree
- 42 universities have Ph.D. granting graduate programs



# Mathematics in Korea at a Glance

## ■ Korean Mathematical Society (KMS)

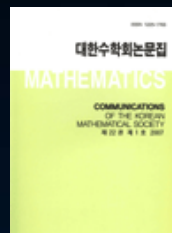
- Founded in 1946
- With over 3,000 individual members
- Has 97 Institutional Members  
(96 Universities and 1 Research Institute)
- Joined IMU in 1981
- Moved to IMU Group II in 1993
- Moved to **IMU Group IV** in 2007



# Mathematics in Korea at a Glance

## ■ KMS Journals

- The Journal of the Korean Mathematical Society  
(bimonthly, English, SCI-E, 2000 copies per issue)
- The Bulletin of the Korean Mathematical Society  
(bimonthly, English, SCI-E, 2000 copies per issue)
- The Communications of Korean Mathematical Society  
(quarterly, English, 2000 copies per issue)
- Five journals by the regional branch societies of KMS



# Rapid Growth

SCIE publications in mathematics in 2007		
1	USA	5,368
2	CHINA	2,627
3	FRANCE	1,944
4	GERMANY	1,467
5	UK	1,244
6	ITALY	1,135
7	JAPAN	959
8	CANADA	937
9	SPAIN	932
10	RUSSIA	814
11	POLAND	428
12	<b>SOUTH KOREA</b>	<b>408</b>
13	ISRAEL	391
14	AUSTRALIA	390
15	BRAZIL	329
16	TAIWAN	296
17	INDIA	280
18	BELGIUM	263
19	NETHERLANDS	248
20	SWEDEN	246

SCIE publications in mathematics in 2008		
1	USA	8,378
2	CHINA	4,624
3	FRANCE	2,850
4	GERMANY	2,350
5	UK	1,826
6	ITALY	1,789
7	CANADA	1,586
8	JAPAN	1,576
9	SPAIN	1,486
10	RUSSIA	1,289
11	<b>SOUTH KOREA</b>	<b>864</b>
12	POLAND	797
13	INDIA	726
14	AUSTRALIA	677
15	ISRAEL	627
16	BRAZIL	588
17	TAIWAN	521
18	TURKEY	474
19	BELGIUM	461
20	ROMANIA	457

- In 2008, **Korea ranked 11th** in SCIE publications in mathematics, more than doubling its publications in less than 10 years
- A **successful model** for many IMU member countries with relatively short history of mathematical research in modern standards

- **Rapid growth** is observed over a broad spectrum including a phenomenal performance surge in **International Mathematical Olympiad**, underscoring the public's growing interest in mathematics

Year	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08
IMO Rank	22	28	32	17	15	15	13	07	08	11	12	07	04	04	06	06	12	05	03	03	04

# International Meetings (2008-2009)

- **2008 Global KMS Conference with Canada-Korea Joint Session**  
- October 23-25, 2008. Estimated # of Participants: 500
- **Korea-Australia Mathematical Analysis Forum 2009**  
- May 11-14, 2009. Estimated # of Participants: 200
- **International Symposium on Symbolic and Algebraic Computation 2009**  
- July 28-31, 2009. Estimated # of Participants: 250
- **2009 Joint Meeting of the Korean Mathematical Society and the American Mathematical Society**  
- December 16-20, 2009. Estimated # of Participants: 700

## 2009 Global KMS Conference Series

Recent meetings for collaborations with specific countries or regions include :

- 2009 PANT-Pohang (Pan Asian Number Theory)
- Finnish-Korean Symposium on Inverse Problems
- KIAS Summer School on Tropical Geometry
- International Conference on Inverse Problems and Applications
- Conference on Algebraic Topology
- Conference for Elliptic and Parabolic PDEs
- The 13th International Workshop on Differential Geometry and Related Fields
- Workshop on Geometric Structures and Submanifolds
- Discovering Biological Patterns in Ecology and Epidemiology