

*A proposal for the first SEAMS School*

**SEAMS-Manila School on the Applications of Algebra and Analysis  
4-15 April 2011, University of the Philippines Diliman**

The SEAMS School of Mathematics aims to bridge undergraduate mathematics education and the research level mathematics done in the regular CIMPA Research Schools. This will be held in the member countries of SEAMS by leading academic institutions or the national mathematical society.

The SEAMS-Manila School on the Applications of Algebra and Analysis will be held on 4-15 April 2011 at the University of the Philippines Diliman (UPD). It will be organized and conducted by the Institute of Mathematics of UPD and the Mathematical Society of the Philippines. Funding for the school will be provided by CIMPA-ICPAM, the Philippine Council for Industry, Energy and Emerging Technology Research and Development (PCIEERD), the National Research Council of the Philippines (NRCP), the Mathematical Society of the Philippines (MSP) and UPD.

The school will consist of ten days of lectures and problem-solving sessions on the areas of 1) partial differential equations, and 2) number theory, coding and cryptography, and 3) mathematical modeling. Senior faculty of the UPD Institute of Mathematics will give the lectures and provide handouts. In particular, the school will cover mini-courses:

- I. Introduction to Partial Differential Equations (MC1) (15 hours)
- II. Number Theory, Coding and Cryptography (MC2) (20 hours)
- II. Introduction to Mathematical Modeling (MC3) (15 hours)

Participants should have an undergraduate degree in mathematics and are either current masteral students of mathematics or plan to pursue research and higher studies. The school will introduce to participants topics and concepts that lead to active areas of research in mathematics.

There will be at most 32 participants—24 coming from universities within and outside Metro Manila, and 8 from Southeast Asian countries. Priority will be given to applicants with no access to advanced mathematical education. The organizers will request SEAMS member countries for nominees to the school. Should the number of applicants to the school exceed the slots available, the organizers will choose the participants.

**Program**

Week 1 (4-8 April)

	S	M	T	W	TH	F	SA
8:30 – 9:00	Arrival	Opening Program					Excursion (9:00 - 4:00)
9:00 – 10:30		<b>MC 1</b>	<b>MC 1</b>	<b>MC 1</b>	<b>MC 1</b>	<b>MC 1</b>	
10:30 –		Break	Break	Break	Break	Break	

10:45							
10:45 – 12:15		MC 1	MC 1	MC 1	MC 1	MC 1	
12:15 – 1:30		Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
1:30 – 3:30		MC 2	MC 2	MC 2	MC 2	MC 2	
3:30 – 4:00		Break	Break	Break	Break	Break	
4:00 – 5:30		Problem Solving	Problem Solving	Problem Solving	Problem Solving	Problem Solving	
6:30 – 8:30			School Dinner				

Week 2 (11-15 April)

	SU	M	T	W	TH	F	SA
9:00 – 10:30	Free Day	MC 3	MC 3	MC 3	MC 3	MC 3	Departure
10:30 – 10:45		Break	Break	Break	Break	Break	
10:45 – 12:15		MC 3	MC 3	MC 3	MC 3	MC 3	
12:15 – 1:30		Lunch	Lunch	Lunch	Lunch	Lunch	
1:30 – 3:30		MC 2	MC 2	MC 2	MC 2	MC 2	
3:30 – 4:00		Break	Break	Break	Break	Break	
4:00 – 5:30		Problem Solving	Problem Solving	Problem Solving	Problem Solving	Closing Program	
6:30 – 8:30					Closing Dinner		

**Budget:**

Budget assumptions:

- 24 Philippine participants
- 8 foreign participants
- 8 lecturers and working staff

	ITEM	Amount in Pesos (PhP)	Amount in Euros (€)
I.	ACCOMMODATIONS		
	a. (double occupancy, NISMED hostel) 16 rooms x P715/room x 13 nights	148,720	2,600

II.	FOOD EXPENSES		
	a. Lunch + 2 snacks during the school	117,280	2,058
	b. Welcome Dinner	18,000	315
	c. Closing Dinner	18,000	315
	d. Lunch and snack during tour	5,000	90
III.	TRANSPORTATION AND TRAVEL EXPENSES		
	a. Airfare of foreign participants (8 pax x P18,000/pax)	144,000	2,525
	b. Airfare of local participants (24 pax x P4,000/pax)	96,000	1,685
	c. Coaster rental for tour	9,000	150
IV.	SUPPLIES AND PRINTING EXPENSES		
	a. Program, lecture notes and tarpaulin, kits	20,000	350
V.	HONORARIA for lecturers, secretariat (4-6 lecturers, 2-3 staff)	24,000	420
	CONTINGENCY		
		PhP 600,000	€ 10,526

1 € = 57 PhP

#### Funding Distribution

	PhP	€
CIMPA	200,000	3,500
PCASTRD	300,000	5,250
UP	36,000	630
MSP-SEAMS	50,000	880
NRCP	20,000	350
TOTAL	606,000	10,610