## ${\bf International~Conference~on} \\ {\bf Applications~of~Mathematics~to~Nonlinear~Sciences} \\ {\bf (AMNS-2016)} \\$

May 26-29, 2016

## Program

Thursday, May 26			
8:00am - 4:00pm	Registration		
8:00am - 8:30am	Coffee		
8:30am - 9:15am	Welcome/Opening		

9:30am - 3:50pm

Mathematical Biology Workshop

Room: Hall 1

Moderator: Naveen Vaidya

Parallel Sessions			
	Invited Session	Invited Session	
	(Analysis)	(Probability, Stat., and Big Data)	
	Room: Hall 2	Room: Hall 3	
	Chair: Kahnaiya Jha	Chair: Gokarna Aryal	
9:40 - 10:00am	Kanhaiya Jha	Siuli Mukhopadhyay (canceled)	
10:00 - 10:20am	Kalimuddin Ahmad	Gokarna Aryal	
10:20 - 10:40am	Dhruba Adhikari	K. D. Sen	
10:40 - 11:00am	Shivam Shreevastava	Ghanshyam Bhatt	
11:00 - 11:20am	Satyanand Panda	Budhinath Padhy	
11:20 - 11:40am	Hironori Shiga	C. B. Gupta	
11:40 - 12:00noon	Ajit Kumar Singh	S. Sivaprasad Kumar	

Lunch (12:00 - 1:30pm)

Bullett (12.00 - 1.00pm)			
	Invited Session	Invited Session	
	(Analysis)	(Statistics and Applications)	
	Room: Hall 2	Room: Hall 3	
	Chair: Rajendra Dahal	Chair: Buddhinath Padhy	
1:30 - 1:50pm	Rajendra Dahal	Netra Khanal	
1:50 - 2:10pm	Kaushik Bal	Sharmistha Ghosh	
2:10 - 2:30pm	Krishna Subedi	Subhash Shende	
2:30 - 2:50pm	Anita Tomar	Sampath Kalluri	
2:50 - 3:10pm	Debraj Chakraborty (canceled)	R. P. Aryal	
3:10 - 3:30pm	Raj Kumar Gupta	B. S. Chaudhary	

Coffee (3:30 - 4:10pm)

4:10 - 5:00pm	Jiahong Wu: The two-dimensional Boussinesq equations with partial dissipation
Principal 1	Room: Hall 1
	Chair: Netra Khanal
5:00 - 5:30pm	Maya Chhetri: Global bifurcation of positive solutions for a class of superlinear elliptic systems
Plenary/Special	Room: Hall 1
Invited 1	Chair: Gajendra B. Thapa

Reception (6:00pm-8:00pm)

Friday, May 27					
8:30 - 9:00am	Coffee	Coffee			
9:00 - 9:50am	Ratnasingham Shiva	iji: Semipositone Problems			
	Room: Hall 1				
Principal 2	Chair: Stephen B Ro	obinson			
9:50 -10:20am	Stephen B Robinson	: Eigencurves for the Stek	lov-Robin problem		
Plenary/Special	Room: Hall 1				
Invited 2	Chair: Dhruba Adh	ikari			
		Parallel Session	ıs		
	Invited Session	Invited Session	Invited Session	Invited Session	
	(Math Biology)	(Numerical Analysis)	(Modeling)	(Topology and Math.	
	Room: Hall 1	Room: Hall 2	Room: Hall 3	Education)	
	Chair: Adnan Sljoka	Chair: Harihar Khanal	Chair: Prashant Kumar	Room: Hall 4	
		Mishra Chair: Özen G		Chair: Özen ÖZER	
10:30 - 10:50am	Adnan Sljoka	Milan Hladik	Prashant Kumar Mishra	Özen ÖZER	
10:50 - 11:10am	S. Srinivas	S. Srinivas Hsing Luh Dil Bahadur Gurung Kailash Ghimire		Kailash Ghimire	
11:10 - 11:30am	BSRV Prasad				
11:30 - 11:50am	Eugenio M. Rocha	Ashok Misra	Akhil Srivastav	Narayan Pahari	
11:50 - 12:10pm				Deepak Basyal	

Lunch (12:10pm-1:20pm)

	Dunch (12.10pm	1.20pm)	
1:20 - 2:10pm	Lindi M. Wahl: Predicting the fate of rare i	mutations in microbial populations	
Principal 3	Room: Hall 1		
	Chair: Naveen Vaidya		
2:10 - 2:40pm	Narendra Dixit: Bistability in the interferor	n signaling network underlies the failure of hepatitis C	
Plenary/Special	treatment		
Invited 3	Room: Hall 1		
	Chair: M. Stanca Ciupe		
2:50 - 3:20pm	Jane Heffernan: Multi-Scale Modelling	Wolfarm Decker: Challenges in the Development of	
Plenary/Special	and Public Health	Open Source Computer Algebra Systems	
Invited 4/5	Room: Hall 1	Room: Hall 2	
	Chair: Dil B. Gurung	Chair: Gerard Pfister	

Coffee (3:20-3:45pm)

Parallel Sessions					
	Contributed Session	Contributed Session Contributed Session		Contributed Session	
	(Math Biology)	(Numerical	(Optimization)	(Modeling)	
	Room: Hall 1	Analysis)	Room: Hall 3	Room: Hall 4	
	Chair: Jai Prakash	Room: Hall 2	Chair: Ram P.	Chair: Samir Shrestha	
	Tripathi	Chair: Ghanshyam	Ghimire		
		Bhatt			
3:45 - 4:00pm	Jai Prakash Tripathi	M. K. Mallick	Ram P. Ghimire	Samir Shrestha	
4:00 - 4:15pm	S.D. Perera	Lukas Krupicka	Urmila Pyakurel	W.J. Jannidi	
4:15 - 4:30pm	Ganga Ram Phaijoo	Jeevandhar Gnawali	CR Rajapaksa	Ami Raj Adhikari	
4:30 - 4:45pm	Maneesha Premaratne	Raju Bhusal	Basudev Ghimire	Parameshwari Kattel	
4:45 - 5:00pm	Chitaranjan	Subhash Subedi	Shyam Sundar Sah	Kaji Prasad Ghimire	
	Mahapatra				

Kathmandu Tour (5:00pm-6:30pm)

Saturday, May 28					
8:30 - 9:00am	Coffee				
9:00 - 9:50am	Gerhard Pfister: Algebraic G	Geometry in Applications			
Principal 4	Room: Hall 1				
	Chair: Tanka N Dhamala				
9:50 - 10:20am	Ying-Hen Hsieh: Impact of C	Ying-Hen Hsieh: Impact of Catastrophic Events on Spread of Dengue: The Case of 2014 Gas			
Plenary/Special	Explosion in Kaohsiung, Taiwan				
Invited 6	Room: Hall 1				
	Chair: Luis Melara				
		Parallel Sessions			
	Invited Session Invited Session Invited Session				
	(Math Biology)	(Differential Equations)	(Numerical Analysis)		
	Room: Hall 1	Room: Hall 2	Room: Hall 3		
	Chair: Hem Raj Joshi Chair: Lakshmi Sankar Chair: K.K. Viswanathan				
10:30 - 10:50am	Hem Raj Joshi	Lakshmi Sankar (canceled)	K.K. Viswanathan		
10:50 - 11:10am	Gergely Rost	Eunkyung Ko	Manmohan Dass Goel		
11:10 - 11:30am	Naveen K. Vaidya	T.V. Anoop	Dadang Amir Hamzah		
11:30 - 11:50am	Luis Melara	Chun-Hsiung Hsia	Harihar Khanal		
11:50 - 12:10pm	Attila Denes	Sarath Sasi (canceled)	Gurmeet Singh		

## Lunch (12:10pm-1:30pm)

1:30 - 2:20pm	Dongho Chae: Challenging mathematical problems in fluid mechanics				
Principal 5	Room: Hall 1				
	Chair: Stefan Mancas				
2:20 - 2:50pm	Robert Smith?: A metapopulation model for	r spread of MRSA in correctional facilities			
Plenary/Special	Room: Hall 1				
Invited 7	Chair: Jane Heffernan				
2:50pm - 3:50pm	Poster/Coffee				
3:50 - 4:20pm	Elissa Schwartz: Antibody kinetics of	Stefan Mancas: Cavitation of spherical bubbles with			
Plenary/Special	equine infectious anemia virus infection of surface tension and viscosity and connection of RP				
Invited 8/9	horses with FRW cosmological equations				
	Room: Hall 1 Room: Hall 2				
	Chair: Robert Smith? Chair: Kedar Uprety				
4:20 - 4:50pm	M. Stanca Ciupe: A bi-stable switch in	Chaudry Masood Khalique: Exact solutions and			
Plenary/Special	virus dynamics can explain the differences   Conservation laws for a (2+1) dimensional KdV-				
Invited 10/11	in disease outcome following $SIV$ $mKdV$ equation				
	infections in rhesus macaques Room: Hall 2				
	Room: Hall 1	Chair: Stefan Mancas			
	Chair: Elissa Schwartz				
Banquet (6:00pm - 8:00pm)					

		Sunday, May 2	<mark>9</mark>		
8:30 - 9:00am	Coffee	Coffee			
9:00 - 9:30am	Mukesh Dhamala:	Mukesh Dhamala: Delayed Neuronal Interactions and Synchronization in the Brain			
Plenary/Special	Room: Hall 1				
Invited 12	Chair: Chet R. Bha	itta			
9:30 - 10:00am	Tanka N. Dhamala	: Impact of Network Flow	Solutions in I	Emergency Pla	anning
Plenary/Special	Room: Hall 1				
Invited 13	Chair: Hsing Luh				
10:10 - 10:40am	Mythily Ramaswar	ny: Ingham type inequaliti	es and	Yijun Lou: I	mpact of biodiversity on
Plenary/Special	applications			Lyme-patho	gen transmission
Invited 14/15	Room: Hall 1		Room: Hall 2		
	Chair: Maya Chhetri Chair: Harihar Khanal			ar Khanal	
		Parallel Session	ıs		
	Contributed Session	Contributed Session	Contributed Session		Contributed Session
	(Math Biology)	(Modeling)	(Analysis)		(Topology)
	Room: Hall 1	Room: Hall 2	Room: Hall	3	Hall 4
	Chair: Gokul K.C.	Chair: Sushil Chandra Karna	Chair: Mitra Devkota		Chair: Dinesh Panthi
10:50 - 11:05am	Gokul K.C.	Sushil Chandra Karna	Mitra Devke	ota	Dinesh Panthi
11:05 - 11:20am	Mamta Agrawal	Buddhi P. Sapkota	Bishnu H. Subedi Umesh Ra		Umesh Rajopadhyaya
11:20 - 11:35am	Saraswati Acharya	Jeevan Kafle	Dhana Kumari Thapa K.B. Manandhar		K.B. Manandhar
11:35 - 11:50am	Ramesh Chandra	Khim B. Khattri	<u> </u>		Pawan Kumar Karna
	Timsina		Bhandari		
11:50 - 12:05pm	11:50 - 12:05pm Sushil Ghimire Puskar Pokhrel R.O. Olayiwola				
	Clo	sing remarks $(12:10-12)$	:20pm) Hall	1	
		Lunch (12:20pm - 1:	20pm)		