Second International Conference on

Applications of Mathematics to Nonlinear Sciences

(AMNS-2019)

June 27-30, 2019 Pokhara, Nepal

Program

		Thursday, J	une 2	<mark>7</mark>		
8:30am-4:00pm	Registration					
8:30-9:00am	Coffee					
9:00-9:45am	Welcome/Opening Ceremony					
10:00-10:50am	Jerry Bona: Applications o	f Model Equations for	Water	· Waves		
Plenary 1	Room: Kaski Baithak					
	Chair: Netra Khanal					
		Invited Ses	ssions	_		
	MB	ME		DE/NA	DE/NA	
	Room: Kaski Baithak	Room: Fewa Baith	ak	Room: Barahi Baithal		
	Chair: Cameron Browne	Chair: Kedar Nep	al	Chair: Rajendra Daha	l Chair: Jose E Castillo	
11:00-11:25am	Cameron Browne	Milos Savic, Gail Tang		Shiv K. Kaushik	Jose E Castillo	
11:25-11:50am	Jonathan Forde	Magesh Chandramouli		Jerome Gilles	Hongqiu Chen	
11:50-12:15pm	Adnan Sljoka	Basanta R. Lamichhane		Menassie Ephrem	Wei Feng	
12:15-1:25pm	Lunch Break					
1:30-2:20pm	Gail S. K. Wolkowicz: Predator-Prey and Host Parasitoid Dynamics: A Bifurcation Theory Approach					
Plenary 2	Room: Kaski Baithak					
	Chair: Robert Smith?					
	Shigui Ruan: Modeling and Analyzing the Kapil K. Sharma: Orthogonal Spline Collocation Methods					
2:30-3:05pm	Transmission Dynamics of Visceral for Singularly Perturbed Problems (canceled)				ems (canceled)	
Special Invited	Leishmaniasis			om: Fewa Baithak		
1/2	Room: Kaski Baithak	Cha		ir: Kedar N. Uprety		
	Chair: Hem Raj Joshi					
3:05-3:20pm	Coffee Break					
Contributed Sessions						
	DE/NA	MB		SC/OP	ST	
	Room: Kaski Baithak	Room: Fewa Baith	ak	Room: Fewa Baithak	Room: Board Room Chair:	
	Chair: Dinesh Panthi	Chair: Buddhi Pan	tha	Chair: Manoj Thapa	Chair: Ram C. Kafle	
3:20-3:35pm	Dinesh Panthi	Buddhi Pantha		Manoj Thapa	Ram C. Kafle	
3:35-3:50pm	Jhavi Lal Ghimire	Vijay Bajiya		Puskar Raj Pokhrel	Gokarna Aryal	
3:50-4:05pm	Bhuwan P. Ojha	Bhawna Malik		Jeevan Kafle	Netra Khanal	
4:05-4:20pm	Ghanshyam Bhatt	Hem Raj Joshi		Ram Sharan Adhikari	Keshav Pokhrel	
4:20-4:35pm	Bijaya Pokharel	Sharad Silwal		Phanindra Bhandari		
4:35-4:50pm	Dhruba Adhikari	Madhav Wagle		Prem Bahadur Chand		

	Friday, J	<mark>June 28</mark>			
Shanti Stupa Sunrise View					
Registration					
Coffee					
Gianni Dal Maso: A Maximal Dissipation Condition for Dynamic Fracture with an Existence Result in a					
Constrained Case					
Room: Kaski Baithak					
Chair: Dhruba Adhikari					
Lindi Wahl: Blurring the Lin ϵ	e Lines between Predator Dave Kung: Mind the Gap: Bridging between educational				
and Prey: the Evolution of $T\epsilon$			earch and college math teaching		
			m: Fewa Baithak		
Chair: Jane Heffernan			ir: Deepak Basyal		
Coffee Break					
	Invited S	essions			
DE/NA	MB		ME	AT	
Room: Kaski Baithak	Room: Fewa Ba	ithak	Room: Barahi Baithak	Room: Board Room	
Chair: Svetlana Roudenko	Chair: Amber S	mith C	Chair: Bal Chandra Luitel	Chair: Timothy Truillo	
Svetlana Roudenko	Amber Smit	h	Mohan Thapa	Timothy Trujillo	
Kai Yang	Elissa Schwartz		Bishnu Khanal	Toshihisa Kubo	
Anudeep Kumar Arora	Libin Rong		Pradip Aryal	Naomi Tanabe	
Santosh Pathak	Stanca Ciupe		Kedar Nepal	Chadwick Gugg	
Kedar N. Uprety	Robert Smits		Gaya Jayakody	Bishnu Hari Subedi	
Lunch Break					
Chris Rasmussen: Insights fro.	m Two National S	tudies of	Precalculus through Calcul	lus 2	
Room: Kaski Baithak					
Chair: Kedar Nepal					
			Ludu: Time Dependent Dynamical Systems with		
~		Accelera	elerated Change		
Room: Kaski Baithak		Room: F	Fewa Baithak		
Chair: Gergely Röst	gely Röst Chair: Harihar Khanal				
Poster Session/Coffee Break					
	Contributed	l Sessions	S		
MB	DE/NA	1	ME	NA/SC/OP	
Room : Kaski Baithak			Room: Barahi Baithak	Room: Board Room	
Chair: Anushaya Mohapatra	Chair: Debendra	a Banjade	Chair: Sarala Luitel	Chair: Jivandhar Jnawali	
I A 1 3.51 .	Debendra Banjade			l .	
Anushaya Mohapatra	Debendra Ba	ınjade	Sarala Luitel	Jivandhar Jnawali	
Anushaya Monapatra Avinita Gautam	Debendra Ba Sarita Kur		Sarala Luitel Krishna P. Pokharel	Jivandhar Jnawali Manish K. Mishra	
		nari			
Avinita Gautam	Sarita Kur	nari oreti	Krishna P. Pokharel	Manish K. Mishra	
Avinita Gautam Sarita Bugalia	Sarita Kur Ananta U _I	nari oreti arki	Krishna P. Pokharel Sagar Dahal	Manish K. Mishra Iswar Mani Adhikari	
Avinita Gautam Sarita Bugalia Rabindra Gupta	Sarita Kur Ananta U _I Ramesh K	nari oreti arki ya R	Krishna P. Pokharel Sagar Dahal Indramani Shreshtha	Manish K. Mishra Iswar Mani Adhikari Tanmay Kundu	
Avinita Gautam Sarita Bugalia Rabindra Gupta Kabita Luitel	Sarita Kur Ananta Up Ramesh K Sharma Pri	nari oreti arki ya R al	Krishna P. Pokharel Sagar Dahal Indramani Shreshtha Tara Paudel Deepak Basyal	Manish K. Mishra Iswar Mani Adhikari Tanmay Kundu Ananda P. Pant	
	Registration Coffee Gianni Dal Maso: A Maximal Constrained Case Room: Kaski Baithak Chair: Dhruba Adhikari Lindi Wahl: Blurring the Line and Prey: the Evolution of Tele Room: Kaski Baithak Chair: Jane Heffernan Coffee Break DE/NA Room: Kaski Baithak Chair: Svetlana Roudenko Svetlana Roudenko Kai Yang Anudeep Kumar Arora Santosh Pathak Kedar N. Uprety Lunch Break Chris Rasmussen: Insights from Room: Kaski Baithak Chair: Kedar Nepal Xingfu Zou: Modelling fear efformedator-prey interactions Room: Kaski Baithak Chair: Gergely Röst Poster Session/Coffee Break MB Room: Kaski Baithak Chair: Anushaya Mohapatra	Registration Coffee Gianni Dal Maso: A Maximal Dissipation Condiconstrained Case Room: Kaski Baithak Chair: Dhruba Adhikari Lindi Wahl: Blurring the Lines between Predate and Prey: the Evolution of Temperate Viruses Room: Kaski Baithak Chair: Jane Heffernan Coffee Break Invited S DE/NA Room: Kaski Baithak Chair: Svetlana Roudenko Chair: Amber S Svetlana Roudenko Amber Smit. Kai Yang Elissa Schwar Anudeep Kumar Arora Libin Rong Santosh Pathak Stanca Ciup Kedar N. Uprety Robert Smit Lunch Break Chris Rasmussen: Insights from Two National S Room: Kaski Baithak Chair: Kedar Nepal Xingfu Zou: Modelling fear effects in predator-prey interactions Room: Kaski Baithak Chair: Gergely Röst Poster Session/Coffee Break Contributed MB Room: Kaski Baithak Chair: Anushaya Mohapatra Chair: Debendra	Coffee	Registration Coffee	

Saturday, June 29				
8:30am-4:00pm	Registration			
8:00-8:30am	Coffee			
8:30-9:20am	Ian W. McKeague: Stein's Method and the Many Interacting Worlds Interpretation of Quantum Mechanics			
Plenary 5	Room: Kaski Baithak			
	Chair: Keshav Pokhrel			
9:30-10:05am	Robert Smith?: The Effects of Stigma on Leprosy	Bal Chandra Luitel: Research for All: Transforming Hearts,		
Special Invited	Room: Kaski Baithak	Minds and Souls of Researchers through STEAM		
7/8	Chair: Stanca Ciupe	Education		
		Room: Fewa Baithak		
		Chair: Krishna K. Shrestha		

10:05-10:20am	Coffee Break				
Invited Sessions					
	MB	MB	DE/NA	PS	
	Room: Kaski Baithak	Room: Fewa Baithak	Room: Barahi Baithak	Room: Board Room	
	Chair: Jane Heffernan	Chair: Paul Hurtado	Chair: Navnit Jha	Chair: Prameshwari Kattel	
10:20-10:45am	Jane Heffernan	Paul Hurtado	Navnit Jha	N. Jalatheeswari	
10:45-11:10am	Hui Wu	Hayriye Gulbudak	Lucrezia Cossetti	Dhaneshwor Prasad	
11:10-11:35pm	David Gerberry	Wenxia Li	Xiaoyan Liu	Venkata S. Sajja	
11:35-12:00pm	Gergely Rost	Andrei Ludu	Dongmei Xiao	Prabhash Pokhrel	
12:00-1:05 pm	Lunch Break				
1:10-2:00pm	Philip Maini: Modelling Collective Cell Migration				
Plenary 6	Room: Kaski Baithak				
	Chair: Naveen Vaidya				
		Contributed	Sessions		
	DE/NA	MB	ME	NA/SC/OP	
	Room: Kaski Baithak	Room: Fewa Baitha	k Room: Barahi Ba		
	Chair: Harihar Khanal	Chair: Saroj Kumar Sa	hani Chair: Pradip A	aryal Chair: Shree Ram Khadk	ka
2:10-2:25pm	Harihar Khanal	Saroj Kumar Sahan	i Binod Prasad F	Pant Shree Ram Khadka	
2:25-2:40pm	Subas Acharya	Yashi Yashi	Irina Aryal	Ram Chandra Dhungana	ıa
2:40-2:55pm	Ramesh C. Timsina	Gauri Bhuju	Niroj Dahal	Suyog Garg	
2:55-3:10pm	Lucrezia Cossetti	Tanuja Das	Gokarna Ary	al Prameshwari Kattel	
3:30pm	3:30pm Gandaki Trout Farm Tour				

Sunday, June 30						
8:30am-9:00am	Coffee					
9:00-9:35am	Narendra Dixit: A dynamical motif defining the fates of viral infections					
Special Invited	Room: Kaski Baithak					
9	Chair: Libin Rong					
9:40-10:15am	John Borkowski: An Overv	view of Several Methods for	$Generating\ Space\text{-}Filling\ Se$	ts of Experimental Design		
Special Invited	Points	Points				
10	Room: Kaski Baithak					
	Chair: Gokarna Aryal					
10:15-10:30 am	Coffee Break					
Contributed Sessions						
	DE/NA/AT	DE/NA	Panel Discussion	NA/SC/OP		
	Room: Kaski Baithak	Room: Fewa Baithak	Room: Barahi Baithak	Room: Board Room		
	Chair: Keshav Acharya	Chair: Narayan Pahari	Chair: Elissa Schwartz	Chair: Narendra N. Jha		
10:30-10:45am	Keshav Acharya	Amita Tripathi	Academic success forum	Narendra N. Jha		
10:45-11:00am	Pawan Shrestha	Real Jung KC	for discussions to	Ganesh Sapkota		
11:00-11:30am	Pawan Kumar B.K.	Krishna K. Shrestha	address questions and	Mubadsher Rashid Rather		
11:30-12:00 pm	Surendraraj Pathak	Arun Kumar	present solutions to			
			challenges faced on career path			
12:00-12:30pm	Final Remarks / Top 3 por	ster presentations announce	<u>.</u>			
	Room: Kaski Baithak					
12:30-1:20pm	Lunch					
1:30pm	KTM departure					

 $DE/NA = Differential\ Equations/Nonlinear\ Analysis$

 $MB = Mathematical \ Biology$

ST = Probability, Statistics, and Big Data

PS = Physical Sciences

 ${\rm AT}={\rm Algebra}$ and Topology

 $ME = Mathematical\ Education$

 $NA/SC/OP = Numerical\ Analysis/Scientific\ Computation/Optimization$