

July 9 (Sun)	13:00-15:00	Public Lecture (open to everybody, in Japanese) Organized by Department of Aerospace Engineering, Nagoya University <b>第31回国際衝撃波シンポジウム市民講演会「CHUBU が育てた飛行機とロケット、空を翔ける！」</b> 「CHUBUが作るロケットの話」 三菱重工機 安井正明 「国産旅客機MRJ(Mitsubishi Regional Jet)を世界の空へ」 三菱航空機機 佐倉潔	Hall
	15:00-16:00	Exhibition: Students' Aerospace Activities Organized by Department of Aerospace Engineering, Nagoya University	Atrium
	16:00-18:00	Registration & Welcome Cocktail	Gallery

July 10 (Mon)	8:00-8:45	Registration	Foyer	
	8:45-9:00	Opening Prof. Akihiro Sasoh, Chair, ISSW31 Prof. Tomohide Niimi, Dean, School of Engineering, Nagoya University	Hall	
	9:00-9:45	Paul Vieille Lecture Chair: Kazuyoshi Takayama Prof. Zonglin Jiang (Institute of Mechanics, Chinese Academy of Sciences) "Aerodynamic Testing at Duplicated Hypersonic Flight Conditions with Hyper-Dragon"	Hall	
	Chair & Judge			
9:55-10:15				
10:15-10:35				
10:35-10:55				
10:55-11:15				
11:15-11:35	Coffee Break	Atrium		
Chair & Judge				
11:35-11:55				
11:55-12:15				

Hall	Symposion	Room A	Room B	Room C
Student Competition (1)	Student Competition (2)	Student Competition (3)	Student Competition (4)	Student Competition (5)
Patrick Gnemmi & Adrien Lemal	Daniel Livescu & Jan Martinez Schramm	Eric Johnsen & Vincent Wheatley	Susumu Kobayashi & Yunfeng Liu	David Mee & Shlomi Pistinner
SBM000101	SBM000014	SBM000105	SBM000290	SBM000415
Alessandro Antonio Filippi	Julien RIDOUX	Luying Wang	Obed Samuelraj Isaac	Clayton R Mulvihill
SBM000391	SBM000180	SBM000078	SBM000121	SBM000377
William Schuyler Hinman	Kento Tanaka	Yu Liang	Samuel J Stennett	Lisong Shi
SBM000210	SBM000066	SBM000081	SBM000255	SBM000318
Hiroataka Kasahara	Bright Bekithemba Ndebele	Lili Liu	Andreas Andrianatos	Chun Kit Uy
SBM000169	SBM000193	SBM000215	SBM000351	SBM000195
Pierpaolo Toniato	Meital Geva	Chun Zheng	Sembian Sundarapandian	Hao Yan

Hall	Symposion	Room A	Room B	Room C
Student Competition (6)	Student Competition (7)	Student Competition (8)	Student Competition (9)	Student Competition (10)
Patrick Gnemmi & Adrien Lemal	Daniel Livescu & Jan Martinez Schramm	Eric Johnsen & Vincent Wheatley	Susumu Kobayashi & Yunfeng Liu	David Mee & Shlomi Pistinner
SBM000149	SBM000132	SBM000106	SBM000089	SBM000022
Irshaad Mahomed	Kento Inokuma	Jingyue Yin	Sudarshan B	Yuan Tao
SBM000094	SBM000338	SBM000102	SBM000311	SBM000017
Sung Min Jo	Arun Kumar, R	Zahra Shaikh	Snehal U Mandlik	Haoxiang Desmond Lim

12:15-12:35	SBM000379 Junmou Shen	SBM000144 Lara Joy Nel	SBM000120 S. She-Ming Lau- Chapdelaine	SBM000382 Omri Ram	SBM000059 Karthick SK
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12:35-13:35	Poster Session (1) Student Competition & Lunch				Atrium
	Judge: Wei Zhao & Randall Paton				
	SBM000051 Sneh Deep	SBM000086 Hiroki Henmi	SBM000137 Sota Yamazaki	SBM000171 KuanliangWang	SBM000194 Jianfu Zhao
	SBM000197 Hiroya Iwafuji	SBM000206 Francesca Gnani	SBM000209 Karthick S K	SBM000324 Tomohiro Maekawa	SBM000404 Sindhu J.L.K
	SBM000414 Sangyoon Lee				

Paper reviewers in Student Competition: David Gildfind, Jiro Kasahara, Khoo Boo Cheong, Atsushi Matsuda, Koichi Mori, Takeharu Sakai, Teo Chiang Juay, Goji Yamada & Akihiro Sasoh

13:35-14:20	Plenary Lecture Chair: Jiming Yang Prof. Oren Sadot (Ben-Gurion University of the Negev) " Experimental Studies of Shock Wave Phenomena at the Ben Gurion University- A Review"				Hall
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	Hall	Symposion	Room A	Room B	Room C
		Richtmyer-Meshkov Instability (1)	Diagnostics/Flow Visualization (1)	Blast Waves (1)	Plasmas/ Magnetohydrodynamics
		Riccardo Bonazza	Harald Kleine	Charles Needham	Christian Mundt
Chair		SBM000095 Georges Jourdan	SBM000294 Kannan Munuswamy	SBM000273 Eric Johnsen	SBM000055 Jan Martinez Schramm
14:30-14:50		SBM000122 Juchun Ding	SBM000203 Shaohua Zhang	SBM000052 Takahiro Ukai	SBM000218 Hiroshi Katsurayama
14:50-15:10		SBM000153 Wenbin Zhang	SBM000289 Po-Hsiung Chang	SBM000403 Motonobu Ishiguro	SBM000138 Sergey Belov
15:10-15:30		SBM000152 Kathy Prestridge	*SBM000304 Shijie Liu	SBM000291 Athira C M	SBM000241 Dmitrii Riashchikov

\* fit to presenter's window

15:50-16:10	Coffee Break				Atrium
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	Room 1	Symposion	Room A	Room B	Room C
		Chemical Kinetics	Facilities	Blast Waves (2)	Supersonic Jet
		E. Arunan	Herbert Olivier	Manjit Singh	Takeharu Sakai
Chair		SBM000342 Yuki Nagata	SBM000380 Junmou Shen	SBM000080 Joseph D Baum	SBM000426 Lianjie Yue
16:10-16:30		SBM000118 Ronald K Hanson	SBM000416 Javaram Vishakantaiah	SBM000082 Fan Zhang	SBM000353 David DONJAT
16:30-16:50		SBM000135 Anatoly Tereza	SBM000328 Sean O'Byrne	SBM000392 David L Frost	SBM000126 Taro Handa
16:50-17:10		SBM000400 Olivier Emile Mathieu	SBM000079 Yunfeng Liu	SBM000096 Ozer Igra	SBM000358 Srisha MV Rao
17:10-17:30		SBM000119 Ronald K. Hanson	SBM000172 Timothy G Cullen	*SBM000334 Hamed Roohani	*SBM000011 Shlomy Shitrit

\* fit to presenter's window

Exhibition

Accompanying  
Persons' Tour

Town Walking  
and Ukai in  
Inuyama

18:30-18:50 Grand Sumo Tounaument Lecture  
Lecturer: Prof. Kazuyoshi Takayama Hall

18:50-20:50 Shocking Sound Waves - Concert by Participants Hall

July 11 8:30-9:00 Registration Fover  
(Tue)

9:00-9:45 Plenary Lecture  
Chair: Akihiro Sasoh  
Prof. Dana D. Dlott (University of Illinois)  
" Shock Compression Spectroscopy Under a Microscope" Hall

	Hall	Symposion	Room A	Room B	Room C
	Supersonic and Hypersonic Flows (1)	Detonation and Combustion (1)	Shock Wave Reflection/Interaction (1)	Shock Waves in Solids/Impact and	Shock Waves in Dense Gases
Chair	Klaus Hannemann	Victor Golub	Oren Sadot	Yasuhiro Tanabe	Yoshitaka Sakamura
9:55-10:15	SBM000323	SBM000167	SBM000381	SBM000393	SBM000150
	Patrick Gnemmi	Nikolay B Anikin	Michael Liverts	Marek Foglar	Robert Hruschka
10:15-10:35	SBM000373	SBM000246	SBM000164	SBM000071	SBM000301
	Pavel Yu Georgievskiy	Tatiana A. Zhuravskaya	Shi Qiu	Alexey E Kovalev	Senthil Kumar Raman
10:35-10:55	SBM000285	SBM000356	SBM000043	SBM000073	SBM000360
	Naofumi Ohnishi	Lei Li	Antoine Marty	Mikhail V Zhernokletov	Zbigniew Andrzej Walenta
10:55-11:15	SBM000270	SBM000189	SBM000267	SBM000247	SBM000157
	Yoimi Kojima	Teo Chaing Juay	Hong Luo	Pavel Sergeevich Utkin	Emile Touber
11:15-11:35	SBM000190	SBM000352	SBM000187	SBM000140	SBM000093
	Chongfa Xie	Sergey V Golovastov	Yonatan Schweitzer	Kojiro Suzuki	Dongjun Liao
11:35-11:55	SBM000423	SBM000024	SBM000178	SBM000412	SBM000227
	David John Mee	Boo Cheong Khoo	Zhiyu Zhang	K. V. Khishchenko	Giulio Gori
11:55-12:15	SBM000060	SBM000364	SBM000413	*SBM000277	SBM000398
	Klaus Hannemann	Haruna Taki	Ben Shoemith	Adrien Lemal	Vincent Wheatley

\* fit to presenter's window

	Poster Session (2) & Lunch			Atrium	
	SBM000302	SBM000327	SBM000076	SBM000038	SBM000363
	Jingzhu Wang	Shlomi Levi Pistinner	Yuta Sugiyama	Maylis Lavayssiere	T M Muruganandam
	SBM000307	SBM000012	SBM000333	SBM000336	SBM000407
	Shun Iwata	Yuta Motoyama	Yasuhiro Tanabe	Yasuhiro Tanabe	Tomohiro Kamiya
	SBM000036	SBM000429	SBM000098	SBM000357	SBM000183
	Jun-Ming Lyu	Laurent Biamino	Dmitry Alekseevich	Sergey V Golovastov	Shlomi Levi Pistinner
	SBM000128	SBM000306	SBM000046	SBM000087	SBM000250
	Kazutaka KITAGAWA	Aleksandr Kalinchenko	Dan Igra	Kiyonobu Ohtani	Takahiro Tamba
	SBM000431	SBM000181	SBM000417	SBM000295	
	Yasumasa Ito	Kenji Okada	Kannan K R	Jagadeesh Gopalan	

13:30-14:15 Plenary Lecture  
Chair: Ronald Hanson  
Dr. Nabih Chaumeix (Centre national de la recherche scientifique (CNRS) )  
"Kinetic Shock Tubes: Recent Developments for the Study of Homogeneous and Heterogeneous Chemical Processes" Hall

Exhibition

**IAC Meeting  
(12:40-13:20)**

Subway Transportation from "Nagoya Daigaku" to "Shiyakusyo (City Hall)"

15:30-18:00 Watching Grand Sumo Tournament Aichi Prefecture Gymnasium

18:30-20:30 IAC Dinner Meeting Student Exchange Program organized by Takahiro Tamba and Nana Mitani

July 12 (Wed) 8:00-8:30 Registration Foyer

8:30-9:15 Ray Stalker Lecture  
Chair: Richard Morgan  
Prof. Joanna M. Austin (California Institute of Technology)  
"Legacy at T5" Hall

9:30-19:30 Excursion (Takayama & Shirakawa-go)

July 13 (Thu) 8:30-9:00 Registration

9:00-9:45 Plenary Lecture  
Chair: Jagadeesh Gopalan  
Prof. Noel T. Clemens (The University of Texas at Austin)  
"Structure and Unsteadiness of 3D Shock Wave / Turbulent Boundary Layer Interactions" Hall

	Hall	Symposion	Room A	Room B	Room C
	Supersonic and Hypersonic Flows (2)	Detonation and Combustion (2)	Shock/Boundary Layer Interaction (1)	Multiphase Flow (1)	Shock Waves in Internal Flows (1)
Chair	Hideyuki Tanno	Jiro Kasahara	Takakage Arai	Marianne Omang	Khoo Boo Cheong
9:55-10:15	SBM000030 Chun WANG	SBM000146 Jian Li	SBM000292 Yoseph Yang	SBM000107 Eric Goncalves	SBM000028 Andrew Russell
10:15-10:35	SBM000156 Anupam Purwar	SBM000225 Xiaoyuan Zhang	SBM000298 Ikhyun Kim	SBM000177 Yujian Zhu	SBM000386 Martin Brouillette
10:35-10:55	SBM000114 Qiu Wang	SBM000200 Jianling Li	SBM000068 Konstantin Ten	SBM000280 Kota NISHIBAYASHI	SBM000259 Kazuya Tajiri
10:55-11:15	SBM000207 Gopalakrishna N	SBM000127 Victor V Golub	SBM000350 Toshihiro Iwasa	SBM000310 Taketoshi Koita	SBM000339 Muruganandam T M

11:15-11:35 Coffee Break Atrium

	Hall	Symposion	Room A	Room B	Room C
	Supersonic and Hypersonic Flows (3)	Plasmas/ Magnetohydrodynamics	Multiphase Flow (2)	Spectroscopy	Shock Waves in Liquids
Chair	Zonglin Jiang	Fan Zhang	Kazuya Tajiri	Xilong Yu	Zbigniew Walenta
11:35-11:55	SBM000154 Bi Zhixian	SBM000054 Ulrich Teubner	SBM000123 Fumiya Togashi	SBM000099 Laurent Michel Le Page	SBM000020 Beric William Skews
11:55-12:15	SBM000303 Hideyuki Tanno	SBM000348 Irina Mursenkova	SBM000160 Gustaaf B. Jacobs	SBM000274 Hanseul Shim	SBM000117 Martin Brouillette
12:15-12:35	SBM000092 Kosuke Fujiwara	SBM000322 Kohei Shimamura	SBM000261 Kei Shimura	SBM000141 Gavel Aleksandrovich	SBM000288 Takehiko Sato

Accompanying Persons' Tour

12:35-13:55

Poster Session (3) & Lunch			Atrium	
SBM000242 Hua Shen	SBM000085 Rei Kawashima	SBM000005 Yao-Chung Hsu	SBM000023 Van Bo NGUYEN	SBM000125 Akira Iwakawa
SBM000223 Shinsuke Udagawa	SBM000235 B. Zang	SBM000025 Yunpeng Wang	SBM000409 Masashi Kashitani	SBM000029 Georges Jourdan
SBM000365 K. P. J. Reddy	SBM000254 Feng Ji	SBM000182 Han Shuguang	SBM000130 Masayuki Takahashi	SBM000058 K. P. J. Reddy
SBM000219 Shiquan Zhu	SBM000015 Humrutha G.	SBM000007 Kung-Ming Chung		

Exhibition

Toyota  
Commemorative  
Museum of  
Industry and  
Technology  
  
&  
  
The Tokugawa  
Art Museum

ISWI  
Lunch Meeting  
(members only)  
(13:00-13:45)

13:55-14:40

Plenary Lecture Chair: K.P.J. Reddy Prof. Kazuhisa Fujita (Japan Aerospace Exploration Agency) "Research on Shock-Induced Aerothermodynamics for Future Planetary Explorations"	Hall
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Chair

14:50-15:10

Hall	Symposion	Room A	Room B	Room C
Supersonic and Hypersonic Flows (4)	Richtmyer-Meshkov Instability (2)	Shock Wave Reflection/Interaction (2)	Diagnostics/Flow Visualization (2)	Shock Wave Interaction with Various Media (1)
Rajesh Gopalapillai	Georges Jourdan	Ozer Igra	Toshiharu Mizukaki	Nicholas Apazidis
SBM000084 Toshiharu Mizukaki	SBM000260 Riccardo Bonazza	SBM000104 Irina V. Krassovskaya	SBM000320 Yasuhiro Egami	SBM000158 Kathy Prestridge
15:10-15:30 SBM000061 Xiaopeng Xue	SBM000143 Mohamad A. Al-Marouf	SBM000083 Federico Alzamora Previtali	SBM000050 Hiroki Nagai	SBM000249 Yoshitaka Sakamura
15:30-15:50 SBM000188 Kanta Fukumoto	SBM000075 Lei Yu	SBM000315 Athira C M	SBM000136 Masaharu Kameda	SBM000305 Marianne G. Omang
15:50-16:10 SBM000151 Anupam Purwar	SBM000205 Pierre Graumer	SBM000271 Kazuaki Hatanaka	SBM000309 Jagadeesh Gopalan	SBM000026 Konstantin Maevskii

16:10-16:30

Coffee Break	Atrium
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Chair

16:30-16:50

Hall	Symposion	Room A	Room B
Supersonic and Hypersonic Flows (5)	Richtmyer-Meshkov Instability (3)	Diagnostics/Flow Visualization (3)	Shock Wave Interaction with Various Media (2)
Joanna M. Austin	Kathy Prestridge	In-Seuck Jeung	Martin Brouillette
SBM000016 Igor Klioutchnikov	SBM000269 Bhalchandra P Puranik	SBM000284 Daigo Aoki	SBM000347 T. Schunck
16:50-17:10 SBM000091 Wang Zonghao	SBM000109 Yuan Li	SBM000371 Masnaori Ota	SBM000067 Pavel Sergeevich Utkin
17:10-17:30 SBM000233 Peng-fei Xiong	SBM000214 Vincent Wheatley	SBM000231 Gaurav Chandola	SBM000236 Oleg G Sutyryn
17:30-17:50 *SBM000184 Gustaaf B. Jacobs	SBM000253 Daryl M Bond	SBM000287 Duc Thuan TRAN	SBM000129 Randall Tyrone Paton

\* fit to presenter's window

Subway Transporation from "Nagoya Daigaku" to "Nagoya"
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18:30-19:30

Cocktail	Nagoya Marriott Associa Hotel
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19:30-22:00

Student Award Ceremony & Banquet	Nagoya Marriott Associa Hotel
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July 14  
(Fri)

8:30-9:00

Registration Foyer

Chair

9:00-9:20

Hall	Symposion	Room A	Room B
Detonation and Combustion	Shock/Boundary Layer	Numerical Methods (1)	Shock/Vortex Interaction
A. Koichi Hayashi	Chih-yung Wen	Heuy Dong Kim	Beric Skews
SBM000354	SBM000266	SBM000039	SBM000166
Li Jiun-Ming	Tokuzo Miyachi	Changtong Luo	Harald Kleine
9:20-9:40	SBM000321	SBM000173	SBM000018
Junpei Nishimura	Zhi Chen	Wai Sun Don	Daniel Livescu
9:40-10:00	SBM000331	SBM000224	SBM000212
Haocheng Wen	EnLai Zhang	Javier Garcia Garrido	SBM000296
10:00-10:20	SBM000230	SBM000251	SBM000201
Rui Zhou	Tamon Nakano	Sebastian Karl	SBM000074
			Sungmin Lee

10:20-10:40

Coffee Break Atrium

Chair

10:40-11:00

Hall	Symposion	Room A	Room B
High Enthalpy	Medical Applications	Nozzle Flow	Shock Waves in Rarefied
Kazuhisa Fujita	Hamid Hosseini	Irina Krassovskaya	Felix Sharipov
SBM000057	SBM000434	SBM000425	SBM000034
Zongmin Hu	Atsuhiro Nakagawa	Chloe Genin	Akira Sakurai
11:00-11:20	SBM000191	SBM000433	SBM000045
Xilong Yu	Jagadeesh Gopalan	Ralf Stark	Ehsan Roohi
11:20-11:40	SBM000222	SBM000435	SBM000335
Wei Zhao	Hun-jae Jang	Rajesh Gopalapillai	SBM000062
11:40-12:00	SBM000252	SBM000436	SBM000090
Takeharu Sakai	Hamid HOSSEINI	Andrea Sansica	SBM000048
12:00-12:20	SBM000376	SBM000437	SBM000027
Feng Ji	Masaaki Tamagawa	Eric Goncalves	SBM000257
12:20-12:40	SBM000276	SBM000116	*SBM000234
Takafumi Yamada	Martin Brouillette	Xin Huang	SBM000142
			Yun Kai

\* fit to presenter's window

12:40-14:00

Lunch Atrium

14:00-14:45

Irvine Israel Glass Lecture  
Chair: Gabi Ben-Dor  
Prof. Kazuyoshi Takayama (Tohoku University)  
"Shock Wave Research: Remembrance of Professor I. I. Glass"

Chair

14:55-15:15

Hall	Symposion	Room A	Room B
Chemical Reacting Flows	Medical and Biological Applications	Numerical Methods (2)	Shock Waves in Internal Flows (2)
Eric Petersen	Masaaki Tamagawa	Naofumi Ohnishi	Teo Chiang Juay
SBM000345	SBM000115	SBM000332	SBM000366
Cheng Wang	Suthee Wiri	Nicholas Apazidis	Ramprakash
			Ananthapadmanaban

Exhibition

Editors' Lunch Meeting  
Shock Waves, an Intl Journal  
(13:10-13:50)

15:15-15:35	SBM000037 Jaegang Kim	SBM000239 Matei Ioan Radulescu	SBM000174 Bing Wang	SBM000220 Rong Huang
15:35-15:55	SBM000047 Chengyang Huang	SBM000165 Jingzhu Wang	SBM000042 Zonglin Jiang	SBM000399 Ramprakash Ananthapadmanaban
15:55-16:15	SBM000056 Vladimir Istomin	SBM000211 Akshay Abhay Datey	SBM000349 Ravi K. Peetala	SBM000186 Rajesh Gopalapillai
16:15-16:35	SBM000419 (invited) Jayaram Vishakantaiah	SBM000421 Akira Tsukamoto	SBM000297 Deliya Kim	SBM000202 Manabu Myokan
16:35-16:55	SBM000243 Grigory Yurievich Bivol	SBM000268 Hiroaki Yamamoto	SBM000175 Mingbo Sun	SBM000272 Akira Iwakawa