

1st ELSI International Symposium Program

Mar 27(Wed)

KURAMAE Hall 09:30-11:30

9:00	Registration		
9:30	Opening address	Y. Mishima	Tokyo Tech
	Guest speech	K. Morimoto	MEXT
	Guest speech	M. Asashima	JSPS
	Guest speech	M. Aizawa	JST
	Guest speech	Y. Yanagisawa	Ehime U.
	Guest speech	M. Nakamura	JAXA
	Guest speech	H. Kitazato	JAMSTEC
	Opening speech "The Big Questions" Presentation	P. Hut	IAS/ ELSI
	Opening speech "Perspectives of ELSI projects" Presentation	K. Hirose	ELSI
12:00-13:45	Lunch		
DIGITAL Hall			
Session 1: Theory of planetary formation		(Chair: C. Ormel)	
13:45-14:10	Keynote "Origin and early evolution of the Earth"	S. Ida	ELSI
14:10-14:25	"Origin of Earth's ocean"	H. Genda	U. Tokyo/ ELSI
14:25-14:45	"From planetary embryos to planetary systems: integrated models of planet formation"	Y. Alibert	Bern U.
14:45-15:05	"On the chemical composition of protoplanetary disks, stars and planets"	T. Guillot	Obs. Cote d'Azur
15:05-15:20	Break		
Session 2: Role of solid Earth and surface environment of primordial Earth		(Chair: H. Genda)	
15:20-15:45	Keynote "Birth of the Geodynamo"	J. Hernlund	UCB/ ELSI
15:45-16:00	"Divergence of Earth and Venus: Coupling climate, tectonics, and thermal history"	P. Driscoll	Yale U.
16:00-16:15	"Laboratory approaches to composition, origin, and evolution of the solid Earth"	T. Irifune	Ehime U. / ELSI
16:15-16:35	"True Polar Wander and Life?"	J. Kirschvink	Caltech/ELSI
16:35-16:50	"Porphyrin, a key molecular group for chemical evolution and early Earth"	N. Ohkouchi	JAMSTEC/ELSI

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16:50-17:10	Discussion for sessions 1 & 2	(Chair: K. Hirose)	ELSI
	Dinner		

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Session 3: Origin of life		(Chair: D. Kiga)	
9:00-9:25	Keynote "Birth place of life on the Hadean Earth"	S. Maruyama	ELSI
9:25-9:40	"Experimental Challenges to Connect the Dots Looking Backwards"	M. Hara	Tokyo Tech/ELSI
9:40-10:00	"RNA, Minerals and the Origin of Life"	S. Benner	U. Florida
10:00-10:20	"Laboratory simulation of formation and alteration of high molecular weight organics in space"	K. Kobayashi	Yokohama National U.
10:20-10:40	"RNA fitness landscapes"	I. Chen	UCSB
10:40-10:55	Break		
10:55-11:15	"Comparative genomics and early cell evolution: inklings of life before DNA"	A. Lazcano	UNAM
11:15-11:35	"Asymmetric Autocatalysis and the Origin of Homochirality of Biomolecules"	K. Soai	Tokyo U. of Sci
11:35-11:50	"Where did the most ancient, ancestral ecosystem originate?"	K. Takai	JAMSTEC/ELSI
11:50-12:05	"Molecular Complexity and the Origin of Life"	J. Cleaves	ELSI
12:05-12:25	"A Formal Framework for Autocatalytic Sets"	W. Hordijk	SmartAnalytiX.com
12:25-14:00	Lunch under SAKURA		
Session 4: Synthetic experiment of life and evolution of genome		(Chair: K. Kurokawa)	
14:00-14:25	Keynote	D. Kiga	ELSI
14:25-14:45	"Experimental evolution of RNA-protein cell model"	T. Yomo	Osaka U.
14:45-15:05	"Are Planets in Habitable Zones Habited?"	G. Cody	Carnegie Inst.
15:05-15:25	"Principles of ancient genome evolution from <i>Oxytricha</i> "	L. Landweber	Princeton U.
15:25-15:40	Break		
15:40-16:00	"Ancient metabolic pathways within the modern protein repertoire"	A. Goldman	Princeton U.
16:00-16:20	"Evolutionary Genomics and the Origin of Life: Insights and Constraint"	G. Fournier	MIT
16:20-16:40	"Self-organization and phoretic motions for the origin of life"	Y. Maeda	Kyoto U.

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16:40-17:00	Discussion for sessions 3 & 4	(chair: J. Cleaves)	
17:00-17:20	Message from WPI program director Missions of WPI Program - Toward internationally opened and globally visible institutes	T. Kuroki	JSPS
18:00-	Banquet in TSUNOBUE ¥5,000 per person to be paid at the registration desk, thank you!		

Mar 29(Fri)

Session 5: Evolution of Earth-life System		(Chair: S. Maruyama)	
09:00-09:25	Keynote "Early evolution of ocean, atmosphere and life: constraints from the geological record."	Y. Ueno & N. Yoshida	ELSI
09:25-09:40	"Origin of cyanobacteria, and its role for evolution of life"	S. Masuda & H. Ohta	Tokyo Tech/ELSI
09:40-09:55	"Deciphering ancient ecosystems with environmental genomics and "Earth-Life DB""	K. Kurokawa & Y. Hongoh	ELSI/ Tokyo Tech
09:55-10:10	"Molecular Simulation of formation for dimer of RNA substance and membrane"	K. Yasuoka	Keio U.
10:10-10:25	Break		
Session 6: Exploration of planets and satellite of Solar system		(Chair: S.Ida)	
10:25-10:50	Keynote "Geochemistry and astrobiology on icy satellties in the solar system"	Y. Sekine	U. Tokyo
10:50-11:05	"Icy moons: why do we care?"	M. Fujimoto	JAXA/ELSI
11:05-11:20	"Asteroid Sample Returns by Hayabusa and Hayabusa2"	H. Kuninaka	JAXA/ELSI
11:20-11:40	"Organic Compounds in Meteorites, Comets, and Cosmic Dusts: Building Blocks of Planets and Life"	H. Yabuta	Osaka U.
11:40-11:55	"Habitable Trinity"	J. Dohm	ELSI
11:55-12:15	Discussion for sessions 5 & 6	(chair: M. Fujimoto)	
12:15-13:45	Lunch		

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Session 7: Exoplanets and towards astrobiology		(Chair: K. Takai)	
13:45-14:10	Keynote "Observation of biomarker"	L. Kaltenegger	MPIA/CfA
14:10-14:30	"Diversity of habitable planets"	D. Lin	UCSC
14:30-14:50	"Paleomineralogy of the Hadean Eon: What minerals are available for origins of life on terrestrial planets?"	R. Hazen	Carnegie Inst. of Washington
14:50-15:05	"A Wide Variety of Habitable Planets"	T. Sasaki	Tokyo Tech
15:05-15:20	"Characterizing surface environment of Earth-like exoplanets via disk-integrated scattered light"	Y. Fujii	U. Tokyo/ELSI
15:20-15:35	Galactic environment	J. Makino	ELSI
15:35-15:55	General discussion	(chair: S. Maruyama)	
Adjourn			
16:30----	Advisory board meeting	Chaired by M. Aizawa	

第1回 地球生命研究所 国際シンポジウム



東京工業大学「地球生命研究所（ELSI : Earth-Life Science Institute）」は、平成24年度 文部科学省 世界トップレベル研究拠点プログラム（WPI）に採択されました。このたび、地球生命研究所は、世界から第一線の研究者が集まる優れた研究環境と高い研究水準を誇る拠点の形成を目指す第一歩として、「第1回 地球生命研究所 国際シンポジウム」を開催いたします。

日時 3/27（水） 13:30 -17:00（開場13:00）

3/28（木） 9:00 -18:00（開場8:30）

3/29（金） 9:00 -16:30（開場8:30）

※参加申込 不要， 参加費 無料

会場 東京工業大学（大岡山キャンパス）

西9号館 デジタル多目的ホール

※交通アクセスの詳細は下記サイトにてご確認ください。

<http://www.titech.ac.jp/about/campus/index.html>



登壇予定者一覧

廣瀬 敬, Steven Benner, 藤本 正樹, Robert Hazen, John Hernlund, Piet Hut, 井田 茂, 入船 徹男, Lisa Kaltenecker, Joseph Kirschvink, 國中 均, 黒川 顕, Antonio Lazcano, Douglas Lin, 牧野 淳一郎, 丸山 茂徳, 高井 研, 吉田 尚弘

他多数

バンケット

日時：3/28（木） 18:00-20:30（開場17:45）

会場：東工大博物館4階 「角笛」

※事前に「お問い合わせ」のメールアドレスまでお申し込みください。

※受付にて会費5,000円を申し受けます。

お問い合わせ

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Earth-Life Science Institute 1st International Symposium



The Earth-Life Science Institute (ELSI) at Tokyo Institute of Technology was selected in 2012 by the World Premier International Research Center Initiatives (WPI) that was launched by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT).

The ELSI 1st International Symposium is to be held as a first step aimed at achieving a very high research standard and providing an excellent research environment with the world's leading researchers.

Date

Wed. March 27, 2013 1:30 pm - 5:00 pm (Registration 1:00 pm)

Thu. March 28, 2013 9:00 am - 6:00 pm (Opening 8:30 am)

Fri. March 29, 2013 9:00 am - 4:30 pm (Opening 8:30 am)

※NO Registration, FREE Admission

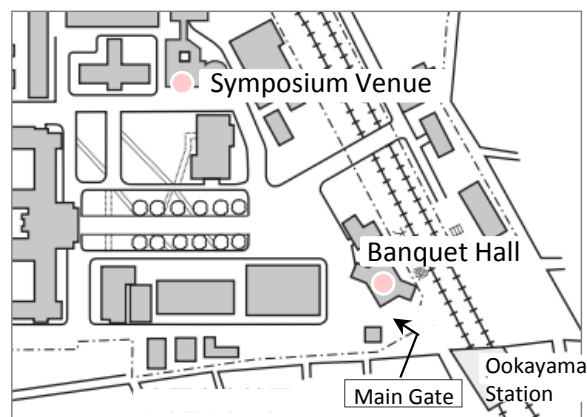
Location

Tokyo Institute of Technology, Ookayama Campus

Multi-Purpose Digital Hall in West Bldg. 9

※Transportation:

<http://www.titech.ac.jp/english/about/campus/index.html>



Presenters (tentative)

Kei Hirose, Steven Benner, Masaki Fujimoto, Robert Hazen, John Hernlund, Piet Hut, Shigeru Ida, Tetsuo Irifune, Lisa Kaltenegger, Joseph Kirschvink, Hitoshi Kuninaka, Ken Kurokawa, Antonio Lazcano, Douglas Lin, Junichiro Makino, Shigenori Maruyama, Ken Takai, Naohiro Yoshida, and more

Banquet

Date: Thu. March 28, 2013

Time: 6:00 pm - 8:30 pm (Opening 5:45 pm)

Location: Restaurant TSUNOBUE, 4th floor of the Centennial Hall

※Registration: Please send email in advance to admin_mem@elsi.jp.

※Fee: 5,000 yen (collected at the front desk)

Contact

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