

Nov. 25	Progress in Physics of the Sun and Stars: A New Era in Helio- and Asteroseismology	
reception		
Nov. 26	Opening address	
08:50-08:55	Shibahashi, Hiromoto	Opening address
08:55-09:05	Hasegawa, Noboru	Welcome address from the Fujihara Science Foundation
		I. Impacts of seismic investigations on solar/stellar physics
		a) physics of the Sun and stars understood from seismology
09:05-09:45	Noels, Arlette	What aspects of stellar physics are we trying to understand through seismic investigations?
09:45-10:15	Schou, Jesper	Progress in global mode helioseismology
10:15-10:40	Turck-Chièze, Sylvaine	Energetic balance of the Sun and stars
break		
11:10-11:40	Fontaine, Gilles	An overview of white dwarf stars
		b) seismic determination of stellar parameters
11:40-12:00	Gizon, Laurent	Asteroseismology constraints on rotation of Sun-like star
12:00-12:20	Vauclair, Gerard	Constraints on the stellar parameters of white dwarf stars from asteroseismology
12:20-12:40	Silva Aguirre, Victor	Convective cores and stellar ages as revealed by Kepler: what do we know?
poster	Ozel, Nesibe	Asteroseismic Twins
lunch		

		II. New observational findings and other enigmatic phenomena	
		a) general overview	
14:10-14:40	Baglin, Annie	Highlights of recent CoRoT results and their impacts on stellar astrophysics	30
14:40-15:00	Garcia, Rafael	Observing dynamical effects on solar-like stars with CoRoT and Kepler	20
		b) compact stars	
15:00-15:30	Charpinet, Stéphane	G-mode oscillations in hot B subdwarf stars	30
15:30-15:50	Lynas-Gray, Anthony	Pulsation amplitude variations in hot subdwarf stars	20
15:50-16:10	Córsico, Alejandro	The pulsating low-mass He-core white dwarfs	20
break			
16:40-17:00	Kleinman, Scott	The new white dwarf catalog and the implications therein for pulsating white dwarf research	20
17:00-17:20	Nitta, Atsuko	Comparing two mode identification techniques in a DB white dwarf	20
17:20-17:40	Provencal, Judith	Decoding convection with white dwarf lightcurves	20
17:40-18:00	Bischoff-Kim, Agnès	Decoding EC14012's rich pulsation spectrum	20
Nov. 27		c) compact stars and disko-seismology	
09:00-09:30	Osaki, Yoji	Oscillations of accretion disks in cataclysmic variable stars	30
poster	Vauclair, Gerard	Stellar consequences of the accretion of stellar debris matter onto white dwarfs	poster
		d) main-sequence stars	
09:30-09:50	Mkrtychian, David	Progress in the detection of p-mode spectra of roAp stars: alpha Circini and gamma Equulei	20

09:50-10:10	Paparó, Margit	Frequency regularities in delta Scuti stars	20
10:10-10:30	Molenda-Żakowicz, Joanna	Directions for the future of the ground-based follow-up for the Kepler space mission	20
poster	Lampens, Patricia	The analysis of the delta Scuti Kepler star HD 188774	poster
poster	Mathur, Savita	Asteroseismic study of the CoRoT target HD169392	poster
poster	Mathur, Savita	Oscillation and surface rotation of more than 400 red giants observed by Kepler	poster
break			
e) red giants			
11:00-11:20	Stello, Dennis	Red giants in the field and open clusters observed by Kepler	20
11:20-11:40	Gaulme, Patrick	Red giants in eclipsing binary systems: analysis of 53 light curves from Kepler data	20
f) spectroscopic observations			
11:40-12:00	Pollard, Karen	Spectroscopic mode identification in gamma Doradus stars	20
poster	Kambe, Eiji	Line-profile variations of the primary of epsilon Aurigae eclipsing binary system	poster
g) diagnostics of 3-D atmospheric structure			
12:00-12:20	Nagashima, Kaori	Understanding helioseismic observables	20
group photo			
lunch			
III. New techniques for helio- and asteroseismology			
14:00-14:20	Shibahashi, Hiromoto	FM stars: a Fourier view of pulsating binary stars	20
14:20-14:40	Kurtz, Don	Super-Nyquist asteroseismology	20
poster	Benkő, József	Connections between quasi-periodicity and modulation in pulsating stars	poster
IV. Impact of the revised solar abundances on astrophysics			
14:40-15:10	Grevesse, Nicolas	“Old” solar abundances? Time to stop using them!	30
15:10-15:40	Guzik, Joyce	The solar abundance and stellar astrophysics	30
15:40-16:00	Baturin, Vladimir	Solar heavy element abundance and the equation of state	20
break			
V. Chemical stratification in the Sun and stars			
16:30-17:00	Vauclair, Sylvie	Atomic diffusion, mixing and element abundances	30
17:00-17:20	Alecian, Georges	Clouds of chemical elements in high atmospheric layers of ApBp stars	20
VI. Constraints from helio- and asteroseismology			
17:20-17:40	Vorontsov, Sergei	Seismic diagnostics of the equation of state and chemical composition in the solar convective envelope	20
17:40-18:00	Ayukov, Sergey	New approach to the solar evolutionary model with helioseismic constraints	20
18:00-18:20	Maeda, Kazuhiro	Constraint on the axion-photon coupling constant using helioseismic solar models	20
poster	Baturin, Vladimir	Current version of SAHA-S equation of state: improvement and perspective	poster
Nov. 28			
VII. Oscillations and excitation mechanisms			
a) physical causes and excitation mechanisms of oscillations in various types of stars			
09:00-09:20	Saito, Hideyuki	Strange mode instability for the pulsation of blue supergiants	20
09:20-09:40	Sonoi, Takafumi	Dipole low-order g-mode instability of metal-poor low-mass main-sequence stars due to the epsilon-mechanism	20

09:40-10:00	Van Grootel, Valerie	The newly discovered pulsating low mass white dwarfs: an extension of the ZZ Ceti instability strip	20
b) observational constraints on excitation and damping mechanisms			
10:00-10:20	Benomar, Othman	Constraining radiative damping, mode inertia and non-adiabatic effects in evolved solar-like stars	20
10:20-10:40	Baudin, Frédéric	Damping rates of oscillations in red giants and main-sequence stars (observed with CoRoT and Kepler)	20
break			
11:10-11:40	Belkacem, Kevin	On the relation between the frequency of the maximum amplitude and the cut-off frequency	30
poster	Grosjean, Mathieu	Evolution of the power spectrum of mixed-modes (especially the lifetimes) during the ascension of the star on the RGB	poster
VIII. Solar and stellar activity			
a) solar dynamo and activity viewed from helioseismology			
11:40-12:10	Kosovichev, Alexander	Helioseismic constraints and paradigm shift in solar dynamo	30
12:10-12:30	Couvidat, Sebastien	Oscillation power in sunspots and quiet Sun from Hinkel analysis on SDO/HMI and SDO/AIA data	20
lunch			
14:00-14:30	Chou, Dean-Yi	The wave functions of solar acoustic waves scattered by sunspots	30
poster	Gizon, Laurent	Helioseismology challenges models of solar convection	poster
poster	Kosovichev, Alexander	Excitation of solar and stellar oscillations by flares	poster
b) magnetic fields and stellar activity across the HR diagram			
14:30-15:00	Mathys, Gautier	Rotation, magnetism, binarity, and chemical peculiarities in A-type stars	30
15:00-15:30	Balona, Luis	Activity in A-type stars	30
15:30-15:50	Mathur, Savita	Constraining magnetic fields in stars exhibiting solar-like oscillations with seismology	20
lake cruise			
IX. Hydrodynamics			
Nov. 29			
a) evolution of the solar/stellar internal rotation, angular momentum transfer			
09:00-09:30	Takehiro, Shinichi	Differential rotation and angular momentum transport caused by thermal convection in rotating spherical shell	30
09:30-10:00	Mathis, Stéphane	Transport by internal waves in stellar interiors and consequences for solar-type and red giant stars evolution	30
10:00-10:20	Neiner, Coralie	Be star outbursts: transport of angular momentum by waves	20
10:20-10:40	Lee, Umin	Angular momentum transfer by non-adiabatic oscillations in weakly differentially rotating stars	20
10:40-11:00	Quazzani, Rihita-Maria	Toward a proper seismic diagnostic for rotation of red giants	20
poster	Ishimatsu, Hiroyuki	Traditional approximation for low-frequency modes and a working hypothesis about episodic mass loss in Be stars	poster
break			
b) turbulence, mixing, convection, magnetic structures			
11:30-11:50	Kitashvili, Irina	Turbulent hydrodynamics and oscillations of moderate-mass stars	20
11:50-12:10	Prat, Vincent	Direct Numerical Simulation of shear mixing in stellar radiative zones	20
12:10-12:30	Jeffery, C. Simon	Shocking: coupling hydrodynamic and radiative transfer models to interpret the dynamic spectrum of the pulsating helium	20
lunch			
14:00-14:30	Gough, Douglas	Shocking remarks on stellar pulsation	30
poster	Kitashvili, Irina	Self-organization of solar turbulent convection in magnetic field	poster

X. Development of theory of stellar oscillations			
a) oscillations of rotating stars			
14:30-14:50	Lignières, François	Semi-analytical solutions of regular p-modes in rapidly rotating stars	20
14:50-15:10	Böhm, Torsten	Validating observationally the evolved theory of oscillations in rapidly rotating stars	20
15:10-15:30	Ballet, Jérôme	Gravity modes in rapidly rotating stars	20
15:30-15:50	Takata, Masao	The origin of rosette modes of oscillations in rotating stars	20
break			
16:20-16:40	Reese, Daniel	Mode visibilities and frequency patterns in rapidly rotating stars	20
poster	Takata, Masao	Should radial modes always be regarded as p modes?	poster
b) nonlinear dynamics			
16:40-17:00	Tanaka, Yasuo	Chaotic motions of pulsating stars with convective zones	20
17:00-17:20	Takahashi, Saaya	Synchronization model for pulsating variables	20
17:20-17:40	Sekii, Takashi	Avoided crossing and synchronization	20
banquet			
		last update: November 14, 2012	