

# Transiting planets. vibrating stars and their connection: 2nd CoRoT symposium

## Tuesday

### 9:00 - 10:00 Session 0 : The CoRoT mission status

Welcome address	A. Baglin/M. Deleuil/J.-L. Counil	20'
CoRoT mission status	O. Vandermarcq	20'

### 10:00 - 12:30 Session I - CoRoT highlights

New members of the CoRoT planets' family	R. Alonso	30'
Some CoRoT highlights in seismology	E. Michel	30'

*Break* 30'

CoRoT. highlights beyond the core science	W. Weiss	30'
The mass of CoRoT-7b, the first transiting superearth	A. Hatzes	20'

*Lunch*

### 14:00 - 18:15 Session II - Transiting planet detection & characterization - Part I

<b>Catching shadows: Kepler's year two transit census</b>	<b>N. Batalha</b>	30'
Frequency of small planets in the CoRoT fields of view	A. Bonomo	20'
An ultradense super-Earth transiting a naked-eye star: 55 Cancri e, Corot-7b and Kepler-10b as exoplanetary laboratories	J. Matthews	20'
A homogeneous study of the light curves of CoRoT's transiting exoplanets	S. Csizmadia	20'
Radial velocity follow-up of CoRoT transiting candidates	F. Bouchy	20'

*Break* 45'

An attempt to observe the secondary eclipse of CoRoT-3b with Keck	D. Ciardi	20'
Identifying the best transit candidate using transit parameters	B. Tingley	20'
Distorted, non-spherical transiting planets: impact on the transit depth and on the radius determination	J. Leconte	20'
A coherent model of the interior and atmosphere of giant planets.	V. Parmentier	20'
A fully automatic method for the analysis of CoRoT and Kepler light curves	I. Castro Leao	20'

## Wednesday

### 9:00 - 12:30 Session III - Time domain stellar astrophysics - Part I

<b>Open questions of the physics of stellar interiors</b>	<b>M.A. Dupret</b>	30'
Seismological diagnostics for solar like stars	I. Roxburgh	20'
On the relation between the cut-off frequency and the frequency of the maximum in the power spectrum in solar-like stars	K. Belkacem	20'
Probing the cores of Extreme Horizontal branch stars by g-mode seismology: the case of KPD 0629-0016 observed with CoRoT	V. Van Grootel	20'

*Break* 30'

Seismic modeling of the CoRoT-target subgiant HD49385 using the properties of $\nu=1$ avoided crossing	S. Deheuvels	20'
An asteroseismic study of the B3 IV star HD 43317 - interpretation of the CoRoT photometry and of ground-based high-resolution spectroscopy	P. Papics	20'

<b>Magnetism of intermediate and high-mass stars</b>	<b>J. Landstreet</b>	30'
Mixed modes in rapidly rotating stars	R.-M. Ouazzani	20'

*Lunch*

### 14:00 - 18:35 Session II - Transiting planet detection & characterization - Part II

<b>Planetary formation and migration</b>	<b>R. Nelson</b>	30'
A comparison of single and multiple transiting planet candidates found by Kepler	D. Latham	20'
Photometric exoplanet mass determination	D. Mislis	20'
SOPHIE velocimetry of Kepler transit candidates	A. Santerne	20'
Transit timing variation in one M-dwarf from the Kepler field: evidence for a new Companion	M. Oshagh	20'
The false positive probability in space- and ground-based surveys	R. Díaz	20'

*Break* 45'

Orbital phases and secondary transit of Kepler-10b - Physical interpretation in the 'Lava-ocean planet' model	A. Léger	20'
Atmospheric modeling of exoplanets	N. Iro	20'
Exoplanets transmission spectroscopy: accounting for eccentricity and longitude of periastron. Superwinds in the upper atmosphere of HD209458b?	M. Montalto	20'
Elliptical instability inside hot-jupiters	D. Cébron	20'
Constraining the exoplanetary system HD 52265 with seismology	L. Gizon	20'

20:00

Symposium Dinner with Moon eclipse

## Thursday

9:00 - 12:30

### Session III - Time domain stellar astrophysics - Part II

<b>Contribution from seismic indexes to star characterization</b>	<b>J. Montalban</b>	30'
Seismic diagnostics of Beta Cephei pulsators	A. Mazumdar	20'
CoRoT's view on the variability of O stars	M. Briquet	20'
A close comparison between high and low amplitude pulsating stars on and below the horizontal branch	E. Poretti	20'
Pulsating pre-main sequence stars in NGC 2264 discovered by CoRoT	K. Zwintz	20'

*Break* 30'

Quasiperiodic patterns, the new observable for $\delta$ -Scuti stars: an in depth study of the CoRoT star HD 174966	A. Garcia Hernandez	20'
Seismic analysis of the exoplanet-host solar-like star HD 52265	J. Ballot	20'
Asteroseismology and binarity combined: CoRoT eclipsing binaries with pulsating components.	C. Maceroni	20'

*Lunch*

14:00 - 17:45

### Session IV - The star-planet connection - Part I

<b>The link between metals, lithium, refractory elements and planet formation around solar analogs</b>	<b>J. Melendez</b>	30'
Stars with planets in the CoRoT space mission: resolving their chemical nature.	B. Canto Martins	20'
Stellar activity study from spot mapping	A. Valio	20'
Towards a complete model of star-planet interaction	S. Mathis	20'
A new approach of the fluid equilibrium tide in stars and giant planets	F. R�emus	20'

*Break* 45'

<b>Activity of late-type stars: causes and photometric effects</b>	<b>J. Linsky</b>	30'
Stellar activity observed with CoRoT : its relation with rotation and convection.	F. Baudin	20'
Modeling transiting planets and their host star	M. Havel	20'

18:30

«Doctor Honoris Causa at University of Provence»: Ceremony for Michel Mayor

## Friday

9:00 - 12:30

### Session IV - The star-planet connection - Part II

<b>Star-planet interactions</b>	<b>N. Lanza</b>	30'
Using star spots to measure the spin-orbit alignment of CoRoT-2b	P. Nutzman	20'
<b>Star-planet interactions - coronal and chromospheric observations</b>	<b>K. Poppenhaeger</b>	30'
Stellar noise and impact on the detection of exo-Earth planets	X. Dumusque	20'

*Break* 30'

Investigating stellar activity with CoRoT asteroseismic data	S. Mathur	20'
Removing systematics whilst preserving stellar variability in Kepler and CoRoT data	S. Aigrain	20'
From stars to giant planets : discovery of Jupiter's global oscillations	P. Gaulme	20'
Connections between stellar activity history and planetary atmospheres	J. Marques	20'

*Lunch*

14:00 - 17:30

### Session V - Planet and stellar populations -

<b>Red giant stars as probes of the structure and evolution of the Galaxy</b>	<b>C. Chiappini</b>	30'
Analysis of the stellar populations in the CoRoT Fields	J.-C. Gazzano	20'
Planetary transit yields of CoRoT and perspectives for Plato	M. Barbieri	20'

*Break* 30'

An overview of stellar rotation with the CoRoT satellite	C.-E. Ferreira Lopes	20'
Red giants as probes of stellar populations in the Milky Way	A. Miglio	20'

### Session VI - Conclusions and future prospects

PLATO: the next generation space-based transit survey	H. Rauer	20'
EChO : The Exoplanet Characterization Observatory	M. Ollivier	20'
Conclusions and prospects		30'

17:30

*The End*