



Scientific Program

Tuesday March 19th

8h30 - 9h00 Registration at the workshop venue
 9h00 - 9h15 Welcome address

Global view on CoRoT results

9h15 - 9h40 The CoRoT mission (*O. Vandermarcq*)
 9h40 - 10h00 What has been observed? (*A. Baglin*)

The CoRoT Data

10h00 - 10h25 General framework (*M. Ollivier*)
 10h25 - 10h45 Background corrections (*S. Chaintreuil*)
 10h45 - 11h00 Ageing (*A. Deru*)

11h00 - 11h45 Coffee break

11h45 - 12h10 The chase for false positives and contamination corrections (*P. Bordé*)
 12h10 - 12h25 Filtering the exoplanet channel for asteroseismology uses (*T. Ceillier*)
 12h25 - 12h40 The use of detrending tools in the study of giant stars in the CoRoT Exo channel (*J. Cabrera*)
 12h40 - 12h55 Puzzling features of data from asteroseismology space missions (*J. Pascual Granado*)
 12h55 - 13h10 SONG-OT the prototype SONG node at Tenerife (*K. Uytterhoeven*)

13h10 - 15h15 Lunch

Data analysis

15h15 - 15h35 VARLET and PHALET (*S. Grziwa*)
 15h35 - 15h55 A new detection method for planetary transit signals (*B. Samuel*)
 15h55 - 16h15 BART, a bayesian approach to rank transits (*O. Demangeon*)
 16h15 - 16h35 The CoRoT colours: a promising data-mining (*F. Borsa*)

16h45 - 17h15 Coffee break

Validating the smallest CoRoT candidates with PASTIS:

17h15 - 17h30 The method (*R. Díaz*)
 17h30 - 17h45 Radial-velocity constraints (*A. Santerne*)
 17h45 - 18h00 Some examples (*J.M. Almenara*)

Posters:

- The Spline-AoV Periodogram (*J. Devor*)
- Search for Moons and Rings Around Exoplanets (*L.R. Tusnski & A. Valio*)

18h00 End of session

Wednesday March 20th : Scientific results

Hot stars

9h00 - 9h20 Hot stars in the whole CoRoT mission (*M. Briquet*)
 9h20 - 9h35 Search for pulsations in HgMn stars with CoRoT (*G. Alecian*)
 9h35 - 9h50 Photometric and spectroscopic variability of the Be star HD 171219 (*E. Janot-Pacheco*)

Poster:

- A search for pulsations in HgMn stars with CoRoT observations of HD 45975 (*T. Morel et al.*)

Intermediate mass stars

9h50 - 10h05 Intermediate mass stars with CoRoT - Introduction (*E. Michel*)
 10h05 - 10h20 Periodic patterns: a "new" observable for delta Scuti stars? (*A. García Hernández*)
 10h20 - 10h35 Potential of regular spacings for mode identification: case of a CoRoT delta Scuti star (*M. Paparó*)
 10h35 - 10h50 The influence of metallicity to the border of the classical instability strip (*W. Weiss*)

Poster:

- Do hybrid stars comprise a distinct group of pulsators? (*M. Hareter & W. Weiss*)

10h50 - 11h20 Coffee break

Planet detections

11h20 - 11h45 From CoRoT light curves to candidates and planets (*M. Deleuil*)
 11h45 - 12h00 False-positives in transit-search programs (*E. Guenther*)
 12h00 - 12h15 Synthesis and lessons of radial velocity follow-up of CoRoT candidates (*F. Bouchy*)
 12h15 - 12h30 Photometric follow-up and the CoRoT legacy (*H.J. Deeg*)
 12h30 - 12h45 Prospects for follow-up observations of CoRoT planets and candidates (*C. Moutou*)
 12h45 - 13h00 A search for disintegrating planets in the CoRoT light curves (*S. Hoyer / R. Alonso*)

13h00 - 14h30 Lunch

14h30 Excursion to Teide Observatory and Cañadas del Teide National Park

Thursday March 21st : Scientific results

Young stars and clusters

9h00 - 9h25 Highlights of the NGC2264 observations, and asteroseismic results (*K. Zwintz*)
 9h25 - 9h45 Simultaneous CoRoT and Chandra observations of PMS stars in NGC2264 (*E. Flaccomio*)
 9h45 - 10h05 New PMS pulsating candidates in the CoRoT fields (*V. Ripepi*)

Poster:

- Ground-based time-series photometry of the Christmas-Tree CoRoT Field SRa01: implications for cluster formation (*Klagivik et al.*)

Activity and Rotation

10h05 - 10h30 Stellar activity and rotation as seen with CoRoT data (*F. Baudin*)
 10h30 - 10h45 Rotational periods for subgiant stars observed by CoRoT (*J.D. do Nascimento Jr.*)
 10h45 - 11h00 Stellar activity in the open cluster IC4756 (*J. Weingrill*)

11h00 - 11h45 Coffee break

11h45 - 12h00 Evolution of the spots on CoRoT-2 (*A. Valio*)

12h00 - 12h15 The effect of stellar activity and limb-darkening on the precision of planet radii (*Sz. Csizmadia*)

Posters:

- KIC 7341231: a laboratory for understanding angular momentum transport during the subgiant phase (*T. Cellier et al.*)
- Extracting information on stellar differential rotation from CoRoT light curves (*M.L. Das Chagas et al.*)
- The effect of stellar spots on the high precision light curve (*M. Oshagh et al.*)
- 2D-models of rapidly rotating early-type stars: the ESTER project (*F. Espinosa Lara & M. Rieutord*)
- Rotation periods and chemical composition of solar analogs and twins revealed by the CoRoT mission: Follow-up status and periods determinations (*J.D. do Nascimento Jr. et al.*)

Binaries

12h15 - 12h40 CoRoT pulsating binaries (*C. Maceroni*)

12h40 - 12h55 CoRoT 105906206: A delta Scuti candidate in an eclipsing binary (*R. da Silva*)

12h55 - 13h10 CoRoT 101186644: A transiting low-mass dense M-dwarf on an eccentric 20.7-day period orbit around a late F-star (*L. Tal-Or*)

13h10 - 13h25 Revisiting the Mass-Radius relation of low mass stars using SOPHIE and the CoRoT planet search survey (*G. Montagnier*)

Poster:

- On the beaming effect in two CoRoT detached eclipsing binaries (*Sz. Csizmadia & P. Klagyivik*)

13h25 - 15h15 Lunch

Planets: Recent discoveries

15h15 - 15h40 Overview of the most recent planetary discoveries of CoRoT (*J. Cabrera*)

15h40 - 15h55 CoRoT-32b: a bloated planet transiting a rapidly rotating gamma Dor star (*D. Gandolfi*)

15h55 - 16h10 Transiting planets of intermediate-mass stars (*D. Sebastian*)

16h10 - 16h25 Transit Time Variation in CoRoT planetary systems (*J. Korth*)

16h25 - 16h40 Search for satellites and rings around the temperate exoplanet CoRoT-9b (*G. Hébrard*)

16h40 - 17h10 Coffee break

17h10 - 17h25 Re-observation of CoRoT-7b with CoRoT (*S. Barros*)

17h25 - 17h40 Planets and Stellar Activity: Hide and Seek in the CoRoT-7 system (*R.D. Haywood*)

17h40 - 17h55 The Planetary System of CoRoT-7 (*A. Hatzes*)

Posters:

- The hot Jupiters CoRoT-30b and 31b (*P. Bordé et al.*)
- New follow-up study of the atmosphere of GJ1214b (*C. Cáceres et al.*)
- Determination of dynamical and physical parameters of the system CoRoT-3 (*M. Tadeu dos Santos et al.*)

Modeling

17h55 - 18h10 Planet Formation - What CoRoT tells us (*G. Wuchterl*)

18h10 - 18h25 Ages & compositions of the CoRoT giant planets: a synthesis (*M. Havel*)

Poster:

- Influence of atmospheric properties on evolution models: application to the CoRoT planets (*V. Parmentier et al.*)
- Habitability in Exoplanets: the extremophilic zone (*C. Lage et al.*)

18h25 End of sessions

19h30 Dinner in Puerto de la Cruz

Friday March 22nd : Scientific results, future and legacy

Solar like pulsators from main sequence to red giants

9h00 - 9h20 Main sequence and subgiants: introduction (*R. García*)

9h20 - 9h40 Red Giants in the sismo and exo fields (*J. Montalbán*)

9h40 - 9h55 New insight on the large separation: observational approach to the asymptotic value (*B. Mosser / K. Belkacem*)

9h55 - 10h10 Seismic analysis of HD43587Aa, a solar-like oscillator in a quadruple system (*P. Boumier / F. Baudin*)

10h10 - 10h25 Asteroseismic model fitting - surface layer corrections and separation ratios (*I. Roxburgh*)

10h25 - 10h40 Studying Stellar magnetic activity with asteroseismic measurements (*R. García*)

10h40 - 10h55 On the relation between observed and predicted global seismic quantities in red-giant stars (*K. Belkacem*)

Poster:

- The correct use of separation ratios of stellar p-modes as a diagnostic of stellar interiors (*I. Roxburgh*)
- Surface layer corrections in asteroseismic model fitting (*I. Roxburgh*)

11h00 - 11h30 Coffee break

Future and legacy

Data bases and archiving

11h30 - 11h50 Upgrades and revision of Exo-dat (*C. Damiani*)

11h50 - 12h10 The CoRoT variability classifier: current status and planned improvements (*J. Debosscher*)

12h10 - 12h25 Surveys of CoRoT Fields (*E. Guenther*)

12h25 - 12h40 SSI, the Stellar Seismic Indices data base (*R. Peralta / R. Samadi*)

12h40 - 13h00 The CNES archive (*O. Vandermarcq*)

13h00 - 13h15 The CoRoT Archive and the Virtual Observatory (*E. Solano*)

13h15 - 13h30 The CDS archive

Posters:

- Classification spectra and determination of stellar fundamental parameters (*A. Kaiser et al.*)
- Hidden systematic uncertainties of stellar parameters and how they can affect the derivation of parameters of transiting planets (*M. Ammler-von Eiff*)
- Spectral typing of CoRoT targets with the low-resolution Nasmith spectrograph at the Tautenburg 2m telescope (*M. Ammler-von Eiff et al.*)

13h30 - 15h15 Lunch

Future projects directly inheriting from CoRoT

15h15 - 15h30 The PLATO Mission (*H. Rauer*)

15h30 - 15h45 The CHEOPS Mission (*R. Alonso*)

15h45 - 16h00 The legacy of CoRoT ground-based observations in the seismo field (*E. Poretti*)

Posters:

- BEST II - A photometric survey telescope in the Atacama desert (*T. Fruth et al.*)
- Results from the ground-based follow-up program of CoRoT planets with BEST (*R. Titz-Weider et al.*)

16h00 Conclusions and general discussion

17h00 End of the meeting

18h30 Guided tour of La Laguna historical center, including wine and tapa.