

Workshop on Juno Ground-Based Support from Amateurs

Scientific Program (Second version)

Notes: All times incorporate the time available for the scientific talk and questions and answers. When planning your talk please consider saving 2-5 min. for questions and answers. Note that we will have several time slots for open discussions on a range of several topics. These discussions will probably extend over coffee breaks and other events over the workshop. **Corrections:** If you see some talk title to be corrected send these corrections to:

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May 12 (Thursday)

8:30 Bus to the observatory. Meeting point: Riquier (see map in the webpage).

Bus will be signaled with the label: “Transports Brema”

Europlanet, Juno and Jupiter science (9:00 – 10:40)

9:00	Welcome	P. Tanga	5 min.
9:05	Some thoughts on amateur observations of the planets: from the eye to the CCD	P. Tanga	10 min.
9:15	Europlanet RI: Promoting amateur collaborations in planetary science	M. Scherf & G. Kargl	10 min.
9:25	The Juno Mission	G. S. Orton	15 min.
9:40	JunoCam & the role of amateurs	G. S. Orton	15 min.
9:55	Probing Jupiter(&Saturn) Interiors	T. Guillot	15 min.
10:10	Jupiter’s oscillations and interior with a Doppler imager	F.X. Schmider	10 min.
10:20	Current state of Jupiter atmosphere from amateur observations	J. Rogers	20 min.

10:40 Coffe break (20 min.)

Jupiter atmosphere observations and techniques (11:00 – 12:50)

11:00	Usage of different filters at Jupiter	C. Pellier	15 min.
11:15	Atmospheric Dispersion Correction	J. P. Prost	10 min.
11:25	Jupiter Imaging Workflow	C. Go	20 min.
11:45	Contributions from American and Australian observers	R. Hueso (talk from T. Barry)	15 min.
12:00	Contributions from ALPO Japan	K. Horikawa	15 min.
12:15	Polarimetric observations of Jupiter	P. Yanamandra-Fisher	15 min.
12:30	New improvements in acquisition software, cameras, optical devices	All	20 min.

Lunch 13:00 – 14:00

Observatory visit 14:00 – 15:00

Jupiter observing with professional size telescopes (15:00 – 16:10)

15:00	Comparisons between amateur imaging and thermal-infrared science and plans for IR observations over 2016-2017	L. N. Fletcher	15 min.
15:15	Jupiter observations at the 1m telescope at Pic du Midi	F. Colas	15 min.
15:30	Jupiter observations with PlanetCam at a 2.2m telescope	A. Sánchez-Lavega	15 min.
15:45	Jupiter observations with the C2PU telescope	J.P. Rivet/J.P. Prost	15 min.
16:00	How amateurs can use 1m range telescopes and other professional facilities	All	10 min.

16:10 Coffe break (20 min.)

Jupiter images: From processing to analysis (16:30 – 18:30)

16:30	High-resolution imaging of Jupiter	D. Peach	20 min.
16:50	Autostakkert: Selecting & stacking frames	E. Kraaijkamp	20 min.
17:10	WinJupos: Measuring features on Jupiter	M. Jacquesson	20 min.
17:30	Mapping Jupiter's atmosphere with amateur observations	M. Vedovato	20 min.
17:50	Voyager 3 project	J. Warrell	10 min.
18:00	Jupiter's zonal winds in 2016 from PlanetCam and amateur observations	R. Hueso	10 min.
18:10	Share of techniques, new needs from processing software and standing problems	All	20 min.

18:30 Return Bus to Nice

20:00 Team(s) Dinner at Nice (to be organized)

The night observation session at the Nice Observatory has been cancelled due to technical difficulties.

May 13 (Friday)

8: 30 Bus to the observatory. Meeting point: Riquier (see map in the webpage)

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Additional Jupiter Science Themes (9:00 – 10:15)

9:00	St. Patrick's Day impact in Jupiter captured from Ireland	J. McKeon	15 min.
9:15	Impacts/flashes detections on Jupiter (and Saturn)	M. Delcroix	20 min.
9:35	Find Flash project of ALPO-Japan	I. Tabe	15 min.
9:50	High resolution imaging of the mutual occultations and eclipses of the Galilean moons during 2014/2015	J. Sussenbach/W. Kivits	15 min.
10:05	Open participations (2-3 slides on different topics)		25 min.
	* Jupiter record of meteorology from visual observations, drawings and ancient graphs	M. Jacquesson	5 min.
	* CMOS technology changed the astronomy world	Matej Mihelčič	5 min.
	TBD	TBD	5 min.
	TBD	TBD	5 min.
	TBD	TBD	5 min.
10:30	Other Jupiter Observations by amateurs	All	10 min.

10:40 Coffe break (20 min.)

Futures steps (11:00 – 13:00)

11:00	How to attract Jupiter observers to contribute to science	J. L. Dauvergne	15 min.
11:15	JUPOS, study of Jupiter based on amateur observations	J.Rogers/M.Vedovato/M. Jacquesson	15 min.
11:30	JunoCam Image Processing	G. Eichstädt	15 min.
11:45	Amateur processing of images from planetary probes	C. Sprianu	10 min.
11:55	Archiving and analyzing amateur data: New PVOL service	R. Hueso	10 min.
12:05	Conclusions / Immediate actions for Juno / Next Steps	All	55 min.

13:00 Lunch at the observatory

14:30 Return Bus to Nice (TBC)

Out of the program

Public conference oriented to local amateur astronomers. The conference will be given in French.

18:00 Salle Nef de l'Observatoire de Nice

Title: Soutenez l'exploration du Système solaire depuis votre jardin

Speaker: Jean-Luc Dauvergne

Summary : Depuis quelques années, les progrès techniques des astronomes amateurs sont tels que les professionnels sont de plus en plus intéressés par leurs données. Il est frappant de constater qu'un grand nombre de missions d'exploration du Système solaire vers Pluton, la comète Chury, Jupiter, Mars ou encore Saturne a recourt à des observations globales faites par les amateurs pour compléter les vues détaillées des sondes. Il devient donc possible pour tout un chacun depuis son balcon ou le fond de son jardin de participer à l'exploration spatiale du Système solaire, ... et bien plus encore.

Conférencier bio: Passionné d'astronomie depuis ses 12 ans, JL Dauvergne a concilié ce centre d'intérêt avec son métier en devenant journaliste scientifique au magazine Ciel et Espace. Il est chef de rubrique en charge des rubriques dédiées à l'observation du ciel. Photographe expérimenté, il arpente le monde en quête de nature, de ciels noirs et d'aurores boréales. Il se rend également régulièrement au Pic du Midi pour observer les planètes avec le télescope de 1 mètre.

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