

### **Communications at Conferences (Congresses, symposia):**

1. **Van Hoolst T., Baland R.-M., Yseboodt M., and Trinh A., 2015**, “Longitudinal librations of Titan and Enceladus.”, EPSC 2015, Nantes, France, oral presentation, Session GP1 on “Outer planets systems”, EPSC2015-659, 27 September-2 October 2015.
2. **Beuthe M., Rivoldini A., Trinh A., and Van Hoolst T., 2015**, “Dynamical tides in icy satellites with subsurface oceans.”, EPSC 2015, Nantes, France, Poster, Session GP1 on “Outer planets systems.”, EPSC2015-238, 27 September-2 October 2015.
3. **Rosenblatt P.,** Charnoz S., Dunseath-Terao M., Dunseath K., and **Trinh A., 2015**, “Formation of Phobos and Deimos on an extended circum-Martian accretion disk.”, AAS/DPS meeting #47, id. #302.8, Gaylor Harbor, MD, USA, November 8-13, 2015.
4. **Dehant V., 2015**, “Topographic coupling at core-mantle boundary in rotation and orientation changes of the Earth.”, 2015 AGU Fall Meeting, San Francisco, USA, December 14-18, 2015.
5. **Trinh A., Van Hoolst T.,** Baland R.M., Beuthe M., Rivoldini A., and **Dehant V., 2015**, “Librations and tides of icy satellites: model comparison for Enceladus.”, 2015 AGU Fall Meeting, San Francisco, USA, Poster - Session P005 - Enceladus: A Decade's Observance of a Habitable World, December 14-18, 2015.
6. Charnoz S., **Rosenblatt P.,** Dunseath K.M., Terao-Dunseath M., **Trinh A.,** Hyodo R., Genda H., and Toupin S., **2016**, “Formation of Phobos and Deimos in a giant collision scenario facilitated by a large transient moon.”, LPSC 47th, The Woodlands, Texas, USA, 21- March 25, 2016.
7. Baland R.M., Coyette A., Beuthe M., **Trinh A., Van Hoolst T.,** and Yseboodt M., **2016**, “Icy Satellites Rotation.”, Planet meeting ROB, 8 January, 2016.
8. **Zhu P.,** Koot L., Rivoldini A., and **Dehant V., 2016**, “An updated set of nutations series derived from the reanalysis of 3.5 decades VLBI observations.”, European Geosciences Union General Assembly EGU2016, Vienna, Austria, April 17-22, 2016.
9. **Dehant V. (invited),** and Folgueira M., Koot L., **Laguerre R.,** Puica M., **Rekier J.,** Rivoldini A., **Triana S.A., Trinh A., Van Hoolst T.,** and **Zhu Ping, 2016**, “Earth Rotation: Theoretical aspects, observation of temporal variations and physical interpretation.”, European Geosciences Union General Assembly EGU2016, Vienna, Austria, April 17-22, 2016.
10. **Laguerre R.,** and Noir J., **2016**, “Instabilities induced by the precession of spherical shells.”, European Geosciences Union General Assembly EGU2016, Vienna, Austria, April 17-22, 2016.
11. **Laguerre R.,** Noir J., **Triana S.A., Rekier J.,** and **Dehant V., 2016**, “Parametric instability induced by the precession of a tilted inner core.”, European Geosciences Union General Assembly EGU2016, Vienna, Austria, April 17-22, 2016.
12. **Rosenblatt P.,** Charnoz S., Dunseath K.M., Dunseath-Terao M., **Trinh A.,** Hyodo R., Genda H., and Toupin S., **2016**, “Origin of Phobos and Deimos: An overview.”, 3rd International conference on the exploration of Phobos and Deimos, NASA-AMES, Moffet Field, CA, USA, July 18-19, 2016.
13. **Dehant V., 2016**, “Rotation of the Earth and planets from observation to understanding of the deep interior.”, Geodesy, Astronomy and Geophysics in Earth Rotation (GAGER2016), Joint IAU/IAG/IERS Symposium, Invited lecture, Wuhan, China, July 19-22, 2016.

14. **Zhu P.**, Rivoldini A., Koot L., **Trinh A.**, **Dehant V.**, **Laguerre R.**, **Rekier J.**, **Triana S.A.**, and **Van Hoolst T.**, 2016, "Basic Earth's Parameters estimated from VLBI observations.", Geodesy, Astronomy and Geophysics in Earth Rotation (GAGER2016), Joint IAU/IAG/IERS Symposium, Wuhan, China, July 19-22, 2016.
15. **Dehant V.**, 2016, "Study of the nutation of the Earth and application to Mars.", Geodesy, Astronomy and Geophysics in Earth Rotation (GAGER2016), Joint IAU/IAG/IERS Symposium, Wuhan, China, July 19-22, 2016.
16. **Rekier J.**, **Triana A.S.**, **Trinh A.**, **Laguerre R.**, **Zhu P.**, and **Dehant V.**, 2016, "Coupling of the rotational modes of the Earth to its inertial modes - a new approach.", Geodesy, Astronomy and Geophysics in Earth Rotation (GAGER2016), Joint IAU/IAG/IERS Symposium, Wuhan, China, July 19-22, 2016.
17. **Trinh A.**, Rivoldini A., **Van Hoolst T.**, and Baland R.M., 2016, "Constraints on the thickness of Enceladus's ice shell from Cassini's libration measurements.", Poster, 15th Symposium of Study of the Earth's Deep Interior, Nantes, France, July 25-29, 2016.
18. **Dehant V.**, 2016, "Other planets observations; interior of terrestrial planets.", Invited lecture, 15th Symposium of Study of the Earth's Deep Interior (SEDI), Nantes, France, July 25-29, 2016.
19. **Triana A.S.**, **Rekier J.**, **Trinh A.**, **Laguerre R.**, **Zhu P.**, and **Dehant V.**, 2016, "Coupling the Earth's Rotational and Gravito-Inertial Modes.", 15th Symposium of Study of the Earth's Deep Interior (SEDI), Poster, Nantes, France, July 25-29, 2016.
20. **Laguerre R.**, Cébron D., Noir J., Schaeffer N., and **Dehant V.**, 2016, "Instabilities induced by the precession of spherical shell.", 15th Symposium of Study of the Earth's Deep Interior (SEDI), Poster, Nantes, France, July 25-29, 2016.
21. **Van Hoolst T.**, Coyette A., Baland R.M., and **Trinh A.**, 2016, "The rotation of Titan and Ganymede.", AAS/DPS meeting #48/ EPSC 11, Pasadena, Ca, USA, October 16-21, 2016.
22. **Rosenblatt P.**, Charnoz S., Dunseath K.M., Dunseath-Terao M., **Trinh A.**, Hyodo R., Genda H., and Toupin S., 2016, "Formation of Phobos and Deimos in a giant collision scenario facilitated by a large transient moon.", abstract 2568051, DPS/EPSC meeting, Pasadena, CA, USA, 16-21 October, 2016.
23. **Dehant V.**, **Laguerre R.**, **Rekier J.**, Rivoldini A., **Trinh A.**, **Triana S.A.**, **Van Hoolst T.**, and **Zhu P.**, 2016, "Core dynamics and the nutations of the Earth.", 2016 AGU Fall Meeting, San Francisco, USA, poster, Session G03 'Earth and Planetary Rotation: Improving Theories, Models and Observations', 12-16 December, 2016.
24. **Rekier J.**, **Triana S.A.**, **Laguerre R.**, **Trinh A.**, **Zhu P.**, and **Dehant V.**, 2016, "A Study of the Impact of the Inertial Modes of the Earth's Liquid Core on its Rotation. Clarifying their Contribution to the Free Core Nutation.", 2016 AGU Fall Meeting, San Francisco, USA, poster, Session G03 'Earth and Planetary Rotation: Improving Theories, Models and Observations', 12-16 December, 2016.
25. **Triana S.A.**, **Rekier J.**, **Trinh A.**, **Laguerre R.**, and **Dehant V.**, 2016, "Coupling the Earth's Rotational and Gravito-Inertial Modes.", 2016 AGU Fall Meeting, San Francisco, USA, Session 'PL-O coupling: connecting Planetary Lithospheres to Outer cores', 12-16 December, 2016.
26. **Laguerre R.**, **Noir J.**, **Schaeffer N.**, **Cebbron D.**, and **Dehant V.**, 2016, "Flow driven in the outer core of a precessing planet with an inner core.", 2016 AGU Fall Meeting, San Francisco, USA, 12-16 December, 2016.
27. **Rivoldini A.**, **Beuthe M.**, and **Trinh A.**, 2016, "What's the matter with Enceladus' gravity?", AGU Fall Meeting 2016, San Francisco, USA, Poster P33A-2115, 12-16 December 2016.

28. **Trinh A.**, Rivoldini A., Beuthe M., Baland R.-M., and **Van Hoolst T.**, 2016, "The thickness of Enceladus's ice shell as seen by Cassini.", AGU Fall Meeting 2016, San Francisco, USA, Poster P33A-2116, 12-16 December 2016.
29. **Van Hoolst T.**, Baland R.M., **Trinh A.**, Coyette A., Yseboodt M., 2017, "The rotation of Ganymede.", 19th EGU General Assembly, EGU2017, Vienna, Austria, 23-28 April 2017.
30. **Laguerre R.**, Cébron D., Noir J., Schaeffer N., **Dehant V.**, 2017, "Dynamo driven by a precessing planet with an inner core.", European Planetary Science Congress 2017, Riga Latvia, 17-22 September 2017.
31. **Zhu P.**, Rivoldini A., and **Dehant V.**, 2017, "Comparison of IAU2006/IAU2000a precession nutation model with VLBI observations.", Journées Systèmes de Référence 2017, on 'Furthering our knowledge of Earth Rotation', University of Alicante, Spain, 25-27 September 2017.
32. **Triana S.A.**, **Laguerre R.**, **Rekier J.**, **Trinh A.**, and **Dehant V.**, 2017, "The coupling between the Earth's Rotational and Inertial eigenmodes: The role of topography.", invited key talk, ESA's deep Earth science meeting, ESTEC, Noordwijk, The Netherlands, 27-29 September 2017.
33. **Van Hoolst T.**, **Coyette A.**, **Baland R.-M.**, 2017, "Variations in Rotation Rate and Polar Motion of a Non-hydrostatic Titan.", AGU 2017, Poster, P13D-2581, New Orleans, USA, 11-15 December 2017.
34. **Van Hoolst T.**, 2017, "Geodesy and the Interior Structure of Planets and Moons of the Solar System.", AGU fall meeting, New Orleans, Louisiana, USA, Oral presentation, 11-15 December 2017.
35. **Triana S.A.**, **Rekier J.**, **Trinh A.**, **Laguerre R.**, **Zhu P.**, and **Dehant V.**, 2017, "The Coupling between Earth's Inertial and Rotational Eigenmodes.", AGU 2017, NG21A-0149, New Orleans, USA, 11-15 December 2017.
36. **Rekier J.**, **Trinh A.**, **Triana S.A.**, and **Dehant V.**, 2017, "Introducing FENNEC: a Framework for Easy Numeration in NEar-spherical Configurations. Applications to core dynamics.", AGU 2017, NG21A-0143, New Orleans, USA, 11-15 December 2017.
37. **Trinh A.**, Rivoldini A., Beuthe M., **Rekier J.**, Baland R.-M., and **Van Hoolst T.**, 2017, "Enceladus's ice shell thickness and ocean depth from gravity, topography, and libration measurements.", AGU 2017, Poster, P43B-2878, New Orleans, USA, 11-15 December 2017.
38. **Zhu P.**, **Dehant V.**, 2018, "Qualification uncertainties of nutation model using VLBI data and its application to study Earth's interior.", EGU General Assembly 2018, G3.3 on 'Earth Rotation: Theoretical aspects, observation of temporal variations and physical interpretation', Vienna, Austria, 8-13 April 2018.
39. **Zhu P.**, and **Dehant V.**, 2018, "Qualification uncertainties of nutation model using VLBI data and its application to study Earth's interior.", EGU General Assembly 2018, G3.3 on 'Earth Rotation: Theoretical aspects, observation of temporal variations and physical interpretation', Vienna, Austria, 8-13 April 2018.
40. **Dehant V.**, **Laguerre R.**, **Rekier J.**, **Rivoldini A.**, **Triana S.A.**, **Trinh A.**, **Van Hoolst T.**, and **Zhu P.**, 2018, "Core dynamics and the nutations of the Earth.", EGU General Assembly 2018, G3.3 on 'Earth Rotation: Theoretical aspects, observation of temporal variations and physical interpretation', Vienna, Austria, 8-13 April 2018.
41. Malkin Z., Gross R., Brzezinski A., Capitaine N., **Dehant V.**, Huang C., McCarthy D., Schuh H., Vondrak J., and Yatskiv Y., 2018, "On the eve of 100-year anniversary of the IAU Commission 19 'Rotation of the Earth'.", XXX IAU General Assembly, Vienna, Austria, 20-31 August 2018.

42. **Rekier J., Trinh A., Triana S.A., Laguerre R., Zhu P., and Dehant V., 2018**, “Viscous tidal dissipation in Enceladus’s ocean.”, EPSC 2018, Berlin, Germany, 16-21 September 2018.

### Communications at Workshops

1. **Dehant V., 2015**, “Clock on the Moon and improvements in reference frames.”, ISSI/HISPAC Workshop on ‘High Performance Clocks, with Special Emphasis on Geodesy and Geophysics and Applications to Other Bodies of the Solar System’, November 30-December 4, 2015.
2. **Van Hoolst T., 2015**, “Precise timing for rotation and interior of terrestrial planets or moons.”, ISSI/HISPAC Workshop on ‘High Performance Clocks, with Special Emphasis on Geodesy and Geophysics and Applications to Other Bodies of the Solar System’, November 30-December 4, 2015.
3. Charnoz S., **Rosenblatt P.**, Dunseath K.M., Terao-Dunseath M., **Trinh A.**, Hyodo R., and Genda H., **2016**, “Formation of Phobos and Deimos in a giant collision scenario, Phobos.”, Phobos, Deimos and Mars Workshop, ELSI/TIT, Tokyo, Japan, 15-16 February, 2016.
4. **Laguerre R.**, Noir J., Rekier J., Triana S.A., and Dehant V., **2016**, “Instabilities induced by the precession of spherical shells.”, Groupe De Recherche (GDR) Dynamo, Barcelona, Spain, 27 June-1 July, 2016.
5. **Van Hoolst T., 2016**, “Gravity, tides and rotation of terrestrial planets and large icy satellites.”, ISSS Course: Planetary Interiors, L’Aquila, Italy, 12-16 September 2016.
6. **Dehant V., 2016**, “Nicole Capitaine, a dedicated career.”, Workshop ‘Understanding the Earth core and nutation’, Brussels, Belgium, September 19-21, 2016.
7. **Zhu P.**, Rivoldini A., **Trinh A.**, **Laguerre R.**, **Rekier J.**, **Triana A.S.**, **Van Hoolst T.**, and **Dehant V., 2016**, “Coupling Constant at CMB and ICB as estimated from VLBI observations.”, Workshop ‘Understanding the Earth core and nutation’, Brussels, Belgium, September 19-21, 2016.
8. **Rekier J.**, **Triana S.A.**, **Trinh A.**, **Laguerre R.**, **Zhu P.**, and **Dehant V., 2016**, “Coupling planetary rotation to internal fluid layer dynamics.”, Workshop ‘Understanding the Earth core and nutation’, Brussels (Belgium), September 19-21, 2016.
9. **Trinh A., 2016**, “Nutations and librations of non-hydrostatic planets and moons.”, Workshop ‘Understanding the Earth core and nutation’, Brussels, Belgium, September 19-21, 2016.
10. **Laguerre R.**, Noir J., Schaeffer N., Cebon D., and **Dehant V., 2016**, “Flow driven in the outer core of a precessing planet with an inner core.”, Workshop ‘Understanding the Earth core and nutation’, Brussels, Belgium, September 19-21, 2016.
11. **Dehant V., 2016**, “Terrestrial planets: internal structure and geodynamics.”, ISSI Forum on ‘Future outstanding questions for solar system planetary science, and associated key representative space missions’, October 13-14, 2016.
12. Asmar S.W., Armstrong J.W., Atkinson D.H., Bell D.J., Bird M.K., **Dehant V.**, less L., Lazio T J.W., Linscott I.R., Mannucci A.J., Mazarico E., Park R.S, Patzold M., Preston R.A., Simpson R.A., **2017**, “The Future of Planetary Atmospheric, Surface, and Interior Science Using Radio and Laser Links.”, Planetary Science Vision 2050 Workshop, Washington, DC., 27-28 February and 1 March 2017.

13. Asmar S.W., Armstrong J.W., Atkinson D.H., Bell D.J., Bird M.K., **Dehant V.**, Iess L., Lazio T.J.W., I.R. Linscott, A.J. Mannucci, Mazarico E., Park R.S., Pätzold M., Preston R.A., and Simpson R.A., **2017**, "The future of planetary atmospheric, surface, and interior science using radio and laser links.", XXXIInd International Union of Radio Science, General Assembly and Scientific Symposium, Montreal, Canada, 9-26 August 2017.
14. **Laguerre R., Triana S.A., Requier J., Trinh A., and Dehant V., 2017**, "Precession driven dynamos in spherical shells at moderate Ekman number.", CNRS Workshop, IGAFD: Interdisciplinary Geo-Astro Fluid Dynamics, Paris, France, 16-18 October 2017.

### **Communication - seminars, conferences**

1. **Dehant V., 2015**, "Rotation and Nutation of a Wobbly Earth, RotaNut.", ERC RotaNut kickoff meeting, Brussels, 12 October 2015.
2. **Requier J., 2015**, "Background and recent work towards RotaNut.", RotaNut kick-off meeting, Royal Observatory of Belgium, October 12, 2015.
3. **Triana S.A., 2015**, "The Curious Inertial Waves - Experiments and their Geo/astrophysical perspectives.", RotaNut kick-off meeting, Royal Observatory of Belgium, October 12, 2015.
4. **Laguerre R., 2015**, "Numerical simulation of MHD flows in axisymmetric containers: application to the dynamo effect.", RotaNut kick-off meeting, Royal Observatory of Belgium, October 12, 2015.
5. **Trinh A., 2015**, "Constraints on interior structure and dynamics from rotation observations.", RotaNut kick-off meeting, Royal Observatory of Belgium, October 12, 2015.
6. **Zhu P., 2015**, "The PICARD-BOS experiment; the Earth's Free Oscillations; tidal triggering of earthquakes; InSight SEIS ground displacements; challenge ahead.", RotaNut kick-off meeting, Royal Observatory of Belgium, October 12, 2015.
7. **Coyette A., Baland R.M., Beuthe M., Trinh A., Van Hoolst T., and Yseboodt M., 2016**, "Icy Satellites Rotation.", Planet meeting ROB, 8 January, 2016.
8. **Dehant V., 2016**, "Study of the rotation of the Earth and application to Mars.", Invited conference, National Committee for Geodesy and Geophysics, Brussels, 21 January, 2016.
9. **Dehant V., 2016**, "LaRa, Lander Radioscience, an instrument on the ExoMars 2018 mission for the understanding of rotation, interior and habitability of Mars.", Seminar at the Université catholique de Louvain, Louvain-la-Neuve, March 7, 2016.
10. **Dehant V., 2016**, "Habiter sur une planète ou une lune du système solaire?", Conference, Centre de Culture Scientifique de l'ULB, Campus de Pareleville, March 18, 2016.
11. **Dehant V., 2016**, "Earth rotation and nutation and application to rotation, interior and habitability of Mars.", Conference at the University Complutense of Madrid, Madrid, Spain, April 8, 2016.
12. **Dehant V., 2016**, "ExoMars LaRa for understanding the habitability, interior and rotation of Mars.", Conference at Space Tech, Brussels, April 29, 2016.
13. **Dehant V., 2016**, "Precession, nutation, and wobble of the Earth and Mars.", Conference Seminary, Wuhan University, Wuhan, China, July 18, 2016.
14. **Dehant V., 2016**, "Rotation and Interior of Terrestrial planets; application to Mars.", Invited Seminary, ETH Zurich, Switzerland, September 30, 2016.
15. **Dehant V., 2016**, "Habiter sur une planète ou une lune du système solaire? L'expérience LaRa, You Space, University of Liege, October 15, 2016.

16. **Dehant V., 2017**, “Habiter sur une planète ou dans une lune dans le système solaire ?”, Alumni ULg, Vervier, Belgium, 6 February 2017.
17. **Dehant V., 2017**, “Les planètes et lunes du système solaire sont-elles habitables? Recherche innovante ! Missions spatiales.”, TDEX UNamur, Namur, Belgium, 22 February 2017.
18. **Dehant V., Requier J., and Laguerre R., 2017**, “Liquid core dynamics coupled to the nutation of the Earth.”, Invited seminary at Grenoble University, Grenoble, France, 8 June 2017.
19. **Dehant V., 2017**, “Habiter sur une planète ou dans une lune dans le système solaire ? ”, Conference at ULg for 3dAge University, 12 September 2017.
20. **Dehant V., 2017**, “Rotation de la Terre et des planètes.”, invited talk, Academy of Science of Paris, Paris, France, 17 October 2017.
21. **Dehant V., 2017**, “The rotation of Earth and Mars and what it tells us about their interiors.”, Rosemary Hutton lecture, University of Edinburgh, UK, 31 October 2017.
22. **Dehant V., 2018**, “Etude des nutations de la Terre et application à la planète Mars.”, invited seminary, Grand séminaire de L'Observatoire Midi-Pyrénées, Toulouse, France, 17 January 2018.  
<https://www.youtube.com/watch?v=Gr3e82m2O6M&feature=youtu.be>
23. **Dehant V., 2018**, “Habitabilité des corps célestes du Système solaire.”, invited conference, Conférence de la Mairie de Toulouse, Toulouse, France, 17 January 2018.
24. **Dehant V., 2018**, “Habitability of planets and Antwerp Space LaRa instrument.”, Invited Seminary at Antwerp Space, Antwerp, 21 February 2018.
25. **Dehant V., 2018**, “Precession and nutation of the Earth and Mars.”, Conference at the University Complutense of Madrid, Madrid, Spain, February 26, 2018.

**Presentation as participation to H2020:**

1. Presentation at H2020 10 year anniversary during EGU 2017, 23-28 April 2017, entitled “ERC Advanced Grant RotaNut: Rotation and Nutation of a wobbly Earth. What makes it so special?”
2. Participation at debate H2020 10 year anniversary ERC (20 March 2017)