

Talks

- **Amit, H.**, Choblet, G., Tobie, G., Terra-Nova, F., Čadek, O., Bouffard, M., Cooling patterns in rotating thin spherical shells – application to Titan’s subsurface ocean. EPSC-DPS Joint Meeting, Geneva, Switzerland, September 2019.
- Pinheiro, K. J., **Amit, H.**, Terra-Nova, F., 2018. Geomagnetic jerk amplitudes recovered by time-dependent flows. IAGA workshop, Conrad Observatory, Austria, June 2018.
- Terra-Nova, F., **Amit, H.**, Hartmann, G. A., Trindade, R. I. F., Pinheiro, K. J., Relating the South Atlantic Anomaly and geomagnetic flux patches. European Geosciences Union, Vienna, Austria, April 2018.
- Terra-Nova, F., **Amit, H.**, Hartmann, G., Trindade, R., Using archaeomagnetic field models to constrain the physics of the core: robustness and preferred locations of reversed flux patches. American Geophysical Union Fall meeting, New Orleans, Louisiana, December 2017.
- Choblet, G., **Amit, H.**, Husson, L., Constraining mantle convection models with paleomagnetic reversals record and numerical dynamos. EPSC, Riga, Latvia, September 2017.
- Thébault, E., Langlais, B., Oliveira, J., **Amit, H.**, Leclercq, L., A time-averaged regional model of the Hermean magnetic field. EPSC, Riga, Latvia, September 2017.
- Choblet, G., **Amit, H.**, Husson, L., Constraining mantle convection models with paleomagnetic reversals record and numerical dynamos. American Geophysical Union Fall meeting, San Francisco, California, December 2016.
- Monteux, J., **Amit, H.**, Arkani-Hamed, J., Choblet, G., Langlais, B., Tobie, G., Johnson, C., Jellinek, M., Consequences of Giant Impacts on the Martian dynamo. American Geophysical Union Fall meeting, San Francisco, California, December 2015.
- Thébault, E., Oliveira, J., Langlais, B., **Amit, H.**, A model of the Hermean magnetic field using a quasi-hemispheric method. Int. Union Geodesy Geophysics, Pragues, Czech Republic, June 2015.
- Oliveira, J. S., Langlais, B., Pais, A., **Amit, H.**, A new method to model partially distributed magnetic field measurements, with application to Mercury. European Geosciences Union, Vienna, Austria, April 2015.
- Saturnino, D., Langlais, B., **Amit, H.**, Manda, M., Describing temporal variations of the geomagnetic field using a modified virtual observatory scheme: application to Swarm data. European Geosciences Union, Vienna, Austria, April 2015.
- Olson, P., **Amit, H.**, Lower Mantle Superplume Growth Stimulates Geomagnetic Reversals. American Geophysical Union Fall meeting, San Francisco, California, December 2014.
- **Amit, H.**, Choblet, G., Olson, P., Monteux, J., Deschamps, F., Langlais, B., Tobie, G., Planetary dynamo features driven by exotic models of core-mantle boundary heat flux. Study of the Earth Deep Interior, Shonan village, Japan, August 2014.

- Oliveira, J.S., Langlais, B., **Amit, H.**, Pais, M.A., Modeling the magnetic field of Mercury using the Time Dependent Equivalent Source Dipole method. European Geosciences Union, Vienna, Austria, April 2014.
- Choblet, G., **Amit, H.**, Relating plate tectonics, mantle convection and variations in paleomagnetic reversal frequency. American Geophysical Union Fall meeting, San Francisco, California, December 2013.
- Olson, P., **Amit, H.**, Interpreting geomagnetic reversal frequency using numerical dynamos. American Geophysical Union Fall meeting, San Francisco, California, December 2013.
- Lefevre, A., Tobie, G., **Amit, H.**, Cadek, O., Choblet, G., Le Mouelic, S., Mitri, G., Sotin, C. Evolution of Titan's outer icy shell: Role of ocean crystallization and surface weathering. American Geophysical Union Fall meeting, San Francisco, California, December 2013.
- **Amit, H.**, Mantle control on planetary dynamos. Dynamics of Earth and planetary cores, Bangalore, India, September 2013.
- Monteux, J., Schaeffer, N., **Amit, H.**, Cardin, P., Can a sinking metallic diapir generate a dynamo? Paléomagnétisme en France, IPGP Paris, France, March 2013.
- Oliveira, J.S., Langlais, B., **Amit, H.**, Pais, M.A., Time Dependent Equivalent Source Dipole - a new method to model the internal magnetic field of Mercury. Paléomagnétisme en France, IPGP Paris, France, March 2013.
- **Amit, H.**, Christensen, U., Langlais, B., The influence of degree-1 mantle heterogeneity on the past dynamo of Mars. Paléomagnétisme en France, IPGP Paris, France, March 2013.
- Choblet, G., Husson, L., **Amit, H.**, Relating plate tectonics, mantle convection and variations in paleomagnetic reversal frequency. Paléomagnétisme en France, IPGP Paris, France, March 2013.
- Choblet, G., **Amit, H.**, Mantle-driven geodynamo features - accounting for non-thermal lower mantle effects. American Geophysical Union Fall meeting, San Francisco, California, December 2011.
- **Amit, H.**, Christensen, U., Langlais, B., The influence of degree-1 mantle heterogeneity on the past dynamo of Mars. EPSC-DPS Joint Meeting, Nantes, France, October 2011.
- Monteux, J., Schaeffer, N., **Amit, H.**, Cardin, P., Can a sinking metallic diapir generate a dynamo? EPSC-DPS Joint Meeting, Nantes, France, October 2011.
- **Amit, H.**, On magnetic diffusion and energy cascade in core dynamics. I Magnet Brazil, Buzios, Brazil, June 2011.
- Christensen, U.R., Dietrich, W., Hori, K., Wicht, J., **Amit, H.**, Langlais, B., Magnetic fields and dynamos in terrestrial planets. American Geophysical Union Fall meeting, San Francisco, California, December 2010.
- Tobie, G., **Amit, H.**, Grasset, O., Langlais, B., Le Feuvre, M., Mocquet, A., Verhoeven, O., Probing Jupiter's moons' interiors with tidal deformation and magnetic fields. European Planetary Science Congress, Rome, Italy, September 2010.

- **Amit, H.**, Core dynamics on various time scales. Study of the Earth Deep Interior, Santa Barbara, California, USA, July 2010.
- **Amit, H.**, Aubert, J., Hulot, G., Stationary, oscillating or drifting mantle-driven geomagnetic flux patches? American Geophysical Union Fall meeting, San Francisco, California, December 2009.
- **Amit, H.**, Choblet, G., Mantle-driven geodynamo features - effects of post-Perovskite phase transition. Natural Dynamos, Slovakia, September 2009.
- **Amit, H.**, Christensen, U., Accounting for magnetic diffusion in core flow inversions from geomagnetic secular variation. Natural Dynamos, Slovakia, September 2009.
- **Amit, H.**, Christensen, U., Accounting for magnetic diffusion in core flow inversions from geomagnetic secular variation. European Geosciences Union, Vienna, Austria, April 2009.
- Olson, P., Driscoll, P., **Amit, H.**, Identifying the causes of reversals from theory and simulations. ISSI workshop on terrestrial magnetism, Bern, Switzerland, March 2009.
- Aubert, J., **Amit, H.**, Hulot, G., Olson, P., Thermo-chemical coupling between the mantle, core and inner core. Study of the Earth Deep Interior, Kunming, China, 2008.
- Aubert, J., **Amit, H.**, Hulot, G., Olson, P., A possible mechanism for coupling the Earth's inner core to thermal mantle structures. International Union of Geodesy and Geophysics, Perugia, Italy, July 2007.

Posters

- Bouffard, M., Choblet, G., **Amit, H.**, Dynamics of Enceladus' ocean projects the heterogeneous seafloor pattern to the base of the ice shell in polar regions. Study of the Earth Deep Interior, Edmonton, Canada, July 2018.
- Thébault, E., Langlais, B., Oliveira, J. S., **Amit, H.**, Leclercq, L., A time-averaged regional model of the Hermean magnetic field. Study of the Earth Deep Interior, Edmonton, Canada, July 2018.
- **Amit, H.**, Coutelier, M., Christensen, U., On equatorially symmetric and antisymmetric geomagnetic secular variation timescales. Study of the Earth Deep Interior, Edmonton, Canada, July 2018.
- Terra-Nova, F., **Amit, H.**, Hartmann, G., Trindade, R., Pinheiro, K., Relating the South Atlantic Anomaly and geomagnetic flux patches. Study of the Earth Deep Interior, Edmonton, Canada, July 2018.
- Pinheiro, K., **Amit, H.**, Terra-Nova, F., Magnetic jerk features recovered by quasi-steady synthetic core flow models. European Geosciences Union, Vienna, Austria, April 2018.
- Terra-Nova, F., **Amit, H.**, Choblet, G., Prescribed longitude and anomalous latitude of the South Atlantic Anomaly. 2nd Conference on Natural Dynamos, Czech republic, June 2017.

- Terra-Nova, F., **Amit, H.**, Hartmann, G., Trindade, R., Pinheiro, K., Relating the South Atlantic Anomaly and geomagnetic flux patches. 2nd Conference on Natural Dynamos, Czech republic, June 2017.
- Terra-Nova, F., **Amit, H.**, Hartmann, G., Trindade, R., Using archaeomagnetic field models to constrain the physics of the core: robustness and preferred locations of reversed flux patches. 2nd Conference on Natural Dynamos, Czech republic, June 2017.
- **Amit, H.**, Coutelier, M., A generalized quasi-geostrophic core flow formalism. American Geophysical Union Fall meeting, San Francisco, California, December 2016.
- Choblet, G., **Amit, H.**, Husson, L., Constraining mantle convection models with paleomagnetic reversals record and numerical dynamos. Study of the Earth Deep Interior, Nantes, France, July 2016.
- Pinheiro, K., **Amit, H.**, Terra-Nova, F., Magnetic jerks induced by field roughness. Study of the Earth Deep Interior, Nantes, France, July 2016.
- Terra-Nova, F., **Amit, H.**, Hartmann, G., Trindade, R., Using archaeomagnetic field models to constrain the physics of the core: robustness and preferred locations of reversed flux patches. Study of the Earth Deep Interior, Nantes, France, July 2016.
- Saturnino, D., Langlais, B., **Amit, H.**, Manda, M., Civet, F., VO-ESD: a modified virtual observatory approach with application to Swarm measurements. Study of the Earth Deep Interior, Nantes, France, July 2016.
- Huguet, L., **Amit, H.**, Alboussiere, T., Magnetic to magnetic and kinetic to magnetic energy transfers at the top of the Earth's core. Study of the Earth Deep Interior, Nantes, France, July 2016.
- Thébault, E., Langlais, B., Oliveira, J., **Amit, H.**, A time-averaged regional model of the Hermean magnetic field. Study of the Earth Deep Interior, Nantes, France, July 2016.
- Oliveira, J., Langlais, B., Pais, A., **Amit, H.**, A New Hermean Magnetic Field Model. Study of the Earth Deep Interior, Nantes, France, July 2016.
- Pinheiro, K. J., **Amit, H.**, Magnetic jerks induced by field roughness, European Geosciences Union, Vienna, Austria, April 2016.
- Terra-Nova, F., **Amit, H.**, Hartmann, G. A., Trindade, R. I. F., The time dependence of reversed archeomagnetic flux patches. European Geosciences Union, Vienna, Austria, April 2016.
- Pinheiro, K. J., Jackson, A., **Amit, H.**, On the applicability of Backus' mantle filter theory. European Geosciences Union, Vienna, Austria, April 2016.
- Coutelier, M., **Amit, H.**, Christensen, U., Geomagnetic secular variation timescales under rapid rotation constraints. European Geosciences Union, Vienna, Austria, April 2016.
- **Amit, H.**, Deschamps, F., Choblet, G., Numerical dynamos with outer boundary heat flux inferred from probabilistic tomography – Consequences for latitudinal distribution of magnetic flux. American Geophysical Union Fall meeting, San Francisco, California, December 2015.

- Oliveira, J.S., Langlais, B., Pais, M.A., **Amit, H.**, Hermean magnetic field models based on MESSENGER measurements. EPSC, Nantes, France, September 2015.
- Monteux, J., **Amit, H.**, Choblet, G., Langlais, B., Tobie, G., Giant impacts, heterogeneous mantle heating and a past hemispheric dynamo on Mars. EPSC, Nantes, France, September 2015.
- Peña, D., **Amit, H.**, Pinheiro, K., Magnetic field stretching at the top of Earth's core. European Geosciences Union, Vienna, Austria, April 2015.
- **Amit, H.**, Deschamps, F., Choblet, G., Numerical dynamos with outer boundary heat flux inferred from probabilistic tomography – Consequences for latitudinal distribution of magnetic flux. European Geosciences Union, Vienna, Austria, April 2015.
- **Amit, H.**, Olson, P., Lower mantle superplume growth excites geomagnetic reversals. European Geosciences Union, Vienna, Austria, April 2015.
- Monteux, J., **Amit, H.**, Choblet, G., Langlais, B., Tobie, G., Giant impacts, heterogeneous mantle heating and a past hemispheric dynamo on Mars. European Geosciences Union, Vienna, Austria, April 2015.
- Saturnino, D., Langlais, B., **Amit, H.**, Mandaia, M., Describing Temporal Variations of the Geomagnetic Field through a Modified Virtual Observatory Scheme: Application to SWARM Measurements. American Geophysical Union Fall meeting, San Francisco, California, December 2014.
- **Amit, H.**, Can downwelling at the top of the Earth's core be detected in the geomagnetic secular variation? Study of the Earth Deep Interior, Shonan village, Japan, August 2014.
- Olson, P., **Amit, H.**, Magnetic reversal frequency scaling in dynamos with thermochemical convection. European Geosciences Union, Vienna, Austria, April 2014.
- **Amit, H.**, Can downwelling at the top of the Earth's core be detected in the geomagnetic secular variation? European Geosciences Union, Vienna, Austria, April 2014.
- Choblet, G., **Amit, H.**, Husson, L., Relating plate tectonics, mantle convection and variations in paleomagnetic reversal frequency. European Geosciences Union, Vienna, Austria, April 2014.
- Oliveira, J.S., Langlais, B., **Amit, H.**, Pais, M.A., Modeling the magnetic field of Mercury using the Time Dependent Equivalent Source Dipole method. American Geophysical Union Fall meeting, San Francisco, California, December 2013.
- Langlais, B., **Amit, H.**, Larnier, H., Thébaud, E., A new model for the geomagnetic power spectrum, with application to planetary core size. European Geosciences Union, Vienna, Austria, April 2013.
- **Amit, H.**, Pais, M.A., Differences between tangential geostrophy and columnar flow. European Geosciences Union, Vienna, Austria, April 2013.
- **Amit, H.**, Pais, M.A., Differences between tangential geostrophy and columnar flow. Paléomagnétisme en France, IGP Paris, France, March 2013.
- Langlais, B., **Amit, H.**, Larnier, H., Thébaud, E., A new model for the geomagnetic power spectrum, with application to planetary core size. American Geophysical Union Fall meeting, San Francisco, California, December 2012.

- Oliveira, J.S., Langlais, B., **Amit, H.**, Pais, M.A., Time Dependent Equivalent Source Dipole - a new method to model the internal magnetic field of Mercury. American Geophysical Union Fall meeting, San Francisco, California, December 2012.
- **Amit, H.**, Pais, M.A., Differences between tangential geostrophy and columnar flow. American Geophysical Union Fall meeting, San Francisco, California, December 2012.
- Huguet, L., **Amit, H.**, Magnetic energy transfer at the top of the Earth's core. American Geophysical Union Fall meeting, San Francisco, California, December 2012.
- Monteux, J., Schaeffer, N., **Amit, H.**, Cardin, P., Can a sinking metallic diapir generate a dynamo? American Geophysical Union Fall meeting, San Francisco, California, December 2012.
- **Amit, H.**, Choblet, G., Mantle-driven geodynamo features - accounting for non-thermal lower mantle effects. Study of the Earth Deep Interior, Leeds, UK, July 2012.
- **Amit, H.**, Christensen, U., Langlais, B., The influence of degree-1 mantle heterogeneity on the past dynamo of Mars. Study of the Earth Deep Interior, Leeds, UK, July 2012.
- **Amit, H.**, Korte, M., Aubert, J., Constable, C., Hulot, G., The time-dependence of intense archeomagnetic flux patches. Study of the Earth Deep Interior, Leeds, UK, July 2012.
- Huguet, L., **Amit, H.**, Magnetic energy transfer at the top of the Earth's core. Study of the Earth Deep Interior, Leeds, UK, July 2012.
- Monteux, J., Schaeffer, N., **Amit, H.**, Cardin, P., Can a sinking metallic diapir generate a dynamo? Study of the Earth Deep Interior, Leeds, UK, July 2012.
- **Amit, H.**, Christensen, U., Langlais, B., The influence of degree-1 mantle heterogeneity on the past dynamo of Mars. The International Conference on Exploring Mars Habitability, Lisbon, Portugal, June 2011.
- **Amit, H.**, Olson, P., A Dynamo Cascade Interpretation of the Geomagnetic Dipole Decrease. Study of the Earth Deep Interior, Santa Barbara, California, USA, July 2010.
- **Amit, H.**, Olson, P., A Dynamo Cascade Interpretation of the Geomagnetic Dipole Decrease. European Geosciences Union, Vienna, Austria, May 2010.
- **Amit, H.**, Choblet, G., Mantle-driven geodynamo features - effects of post-Perovskite phase transition. European Geosciences Union, Vienna, Austria, May 2010.
- **Amit, H.**, Aubert, J., Hulot, G., Stationary, oscillating or drifting mantle-driven geomagnetic flux patches? Natural Dynamos, Slovakia, September 2009.
- **Amit, H.**, Olson, P., Geomagnetic Dipole Tilt Changes Induced by Core Flow. American Geophysical Union Fall meeting, San Francisco, California, December 2007.
- Aubert, J., **Amit, H.**, Hulot, G., Olson, P., A thermo-chemical wind coupling the Earth's inner core and deep mantle. American Geophysical Union Fall meeting, San Francisco, California, December 2007.
- **Amit, H.**, Aubert, J., Hulot, G., Olson, P., Thermal wind at the top of the core. American Geophysical Union Fall meeting, San Francisco, California, December 2006.

- Aubert, J., **Amit, H.**, Hulot, G., Can thermal mantle control be identified in Earth's core surface flows? American Geophysical Union Fall meeting, San Francisco, California, December 2006.
- **Amit, H.**, Aubert, J., Hulot, G., Olson, P., Mantle-driven thermal wind at the top of the core. Study of the Earth Deep Interior, Prague, Czech Republic, July 2006.
- Aubert, J., **Amit, H.**, Hulot, G., Can thermal mantle control be identified in Earth's core surface flows? Study of the Earth Deep Interior, Prague, Czech Republic, July 2006.
- **Amit, H.**, Aubert, J., Hulot, G., Olson, P., Mantle-driven thermal wind at the top of the core. 26rd International Conference on Mathematical Geophysics, Sea of Galilee, Israel, June 2006.
- Andrews, D., **Amit, H.**, Olson, P., Rapidly evolving sources of geomagnetic dipole tilt on the core-mantle boundary. American Geophysical Union Fall meeting, San Francisco, California, December 2005.
- Aurnou, J., Aubert, J., **Amit, H.**, Andreadis, S., Olson, P., Thermal Winds in the Tangent Cylinder. American Geophysical Union Fall meeting, San Francisco, California, December 2005.
- **Amit, H.**, Olson, P., The origin of the geomagnetic dipole and tilt. European Geosciences Union, Vienna, Austria, April 2005.
- Olson, P., **Amit, H.**, The origin of the rapid decrease of the geomagnetic dipole moment. European Geosciences Union, Vienna, Austria, April 2005.
- **Amit, H.**, Olson, P., Time-Average Core Flow: Mantle vs. Core Origins. American Geophysical Union Fall meeting, San Francisco, California, December 2004.
- Olson, P. **Amit, H.**, Andreadis, S., Liu, L., A Dynamo Mechanism for Rapid Decrease of the Geomagnetic Dipole Moment. American Geophysical Union Fall meeting, San Francisco, California, December 2004.
- **Amit, H.**, Olson, P., Helical core flow from geomagnetic secular variation. Study of the Earth Deep Interior, Garmisch-Partenkirchen, Germany, July 2004.
- **Amit, H.**, Olson, P., Christensen, U., Core flow inversions: Constraints from dynamo theory. Study of the Earth Deep Interior, Garmisch-Partenkirchen, Germany, July 2004.
- **Amit, H.**, Olson, P., A new Method for Determining the Fluid Flow Below the Core-Mantle Boundary From Global Geomagnetic Field Models. Planetary Dynamos, Les Houches, France, March 2003.
- **Amit, H.**, Olson, P., A new Method for Determining the Fluid Flow Below the Core-Mantle Boundary From Global Models of the Geomagnetic Field. American Geophysical Union Fall meeting, San Francisco, California, December 2002.
- **Amit, H.**, Lyakhovsky, V., Katz, A., Starinsky, A., Burg, A., Spring discharge anomaly: effect of low magnitude earthquakes. 23rd International Conference on Mathematical Geophysics, Villefranche sur mer, France, June 2000.
- **Amit, H.**, Lyakhovsky, V., Katz, A., Starinsky, A., Burg, A., Groundwater flow mechanisms in perched carbonate aquifers. Israel Geological Society annual meeting, Maalot, April 2000.