Monday 25th June 2018

8h00 - 9h00: Registration

9h00 - 9h15: Welcome

Session “Paleoenvironments”

9h15 - 9h20: Introduction by conveners: J. Roskin and A. Stone


9h50 - 10h10: Gorczynska A., P. Stéphan, Y. Pailler, and B. Le Gall, Holocene coastal dune evolution in western France: reconstruction from archaeological data.


10h30 - 11h00: Coffee break – Group Photo

11h00- 11h20: Yu L., Aeolian-fluvial interactions stabilize desert in the Qaidam basin, Qinghai-Tibetan plateau.

11h20 - 11h40: Roettig C.-B. and D. Faust, Dust deposits ruling palaeosurfaces separating dune generations on northern Fuerteventura.

11h40-12h00: Thomas D.S.G. and R.M. Bailey, Modelling quaternary desert dune system accumulation using luminescence age data.

Session “Aerodynamics and sediment transport”

12h00 - 12h05: Introduction by conveners: C. McKenna-Neuman and H. Yizhaq

12h05 - 12h30: Martin R.L. and J.F. Kok, Equal susceptibility and size-selective mobility in aeolian saltation. Solicited talk.

12h30 - 13h30: Lunch


15h40 - 16h00: Louge M.Y., A. Valance, J. Fang, S. Harnett and F. Porte-Agel, Anomalous shear velocity at the brink of a barchan dune.

16h00 - 16h20: Gunn A., M. Wanker, D.A. Edmonds, R.C. Ewing and D.J. Jerolmack, From geostrophic to grain: momentum transfer in aeolian systems.

16h20 - 16h40: Baas A.C.W., I. Delgado-Fernandez and D.W.T. Jackson, Measuring and testing aeolian sand transport models across a spatial grid network.

16h40 - 17h00: Coffee Break

17h00 - 17h20: Dupont P., A. Ould El Moctar, A. Valance and T. D. Ho, Experimental study of saltated sand cloud over erodible and rigid bed conditions.

17h20 - 17h40: Gillies J.A., V. Etyemezian and G. Nikolich, Trapping of sand-sized particles exterior and interior to large porous roughness forms in the atmospheric surface layer.

Session “Anthropogenic interactions”

17h40 - 17h45: Introduction by conveners: J. Leys and G. Sterk

17h45 - 18h15: Sharratt B., Best management practices to mitigate wind erosion and particulate emissions from agricultural soils. Solicited talk.


19h00: Ice breaker

Tuesday 26th June 2018

9h00 - 9h45: P. Ginoux, Modeling mineral dust interactions with the earth system: progress, challenges and prospects. Invited talk.

Session “Dust dynamics and processes: emission, dispersal, and deposition”

9h45 - 9h50: Introduction by conveners: M. Klose and J.-B. Stuut

9h50 - 10h20: van Hateren H., Eolian dust dispersal patterns reflected by the particle size characteristics of Chinese loess. Solicited talk.

10h20 - 10h40: Bristow C.S. and T.H. Moller, Do Sahara dune sands make dust?

10h40 - 11h00: Coffee break

11h00 - 11h20: Etyemezian V., J. Gillies and G. Nikolich, Resuspension potential of volcanic ash.

11h40 - 12h00: Rashki A. and D. Kaskaoutis, Identification of high-resolution dust sources and dynamics over Hamoun ephemeral lakes using satellite image processing.

12h00 - 12h20: Richards-Thomas T. and C. McKenna-Neuman, Factors affecting the settling rate of Icelandic dust.

12h20 - 12h40: Schepanski K. and A. Kubin, Atmospheric controls on the interannual variability of dust concentration and dust transport pathways.

12h40 - 13h30: Lunch


15h00 - 15h30: ISAR Distinguished Career Award: Prospero J., A random walk to the Bodélé Depression: How I became a global dust collector.

15h30 - 15h50: van der Does M., P. Knippertz, P. Zschenderlei, G. Harrisso and J.-B. Stuut, Possible mechanisms behind the long-range transport of giant mineral dust particles.


16h30 - 16h45: Coffee break

Session “Interaction with vegetation”

16h45 - 16h50: Introduction by conveners: J. Gillies


17h20 - 17h40: Edwards B.L., N.P. Webb, J.W. Van Zee, and A. Chappell, Vegetation effects on spatiotemporal variability in aeolian mass flux over a range of ecological conditions.


18h20 - 19h20: ISAR General Assembly

19h20 - 21h00: ISAR Board Meeting (Diner)
Wednesday 27th June 2018

8h30 - 14h30: Field trip to the Dune du Pilat with picnic
15h00 - 18h00: Visit and wine testing at the Chateau Pape Clément
18h00 - 20h00: Aeolian Research - Editorial meeting

Thursday 28th June 2018

9h00 - 9h45: Andreotti B., A physical perspective on aeolian (and non-aeolian) dunes, Invited talk.

Session “Dunes and bedforms”

9h45 - 9h50: Introduction by conveners: M. Baddock, R. Ewing, L. Ping.
9h50 - 10h20: Rubin D. and S. Courrech du Pont, Why longitudinal dunes are rarely recognized in the geologic record—update after 3 decades. Solicited talk.
10h20 - 10h40: Rozier O., S. Courrech du Pont, C. Gadal, P. Claudin and C. Narteau, Morphogenesis and stability of elongating dunes. Solicited talk.
10h40 - 11h00: Coffee break
11h00 - 11h20: Gadal C., P.Claudin, S. Courrech du Pont, O.Rozier and C.Narteau, Dune growth under multidirectional wind regimes.
11h40 - 12h00: Wang P., N. Huang and J. Zhang, Aeolian sand ripples instability and grain sorting.
12h00 - 12h20: Liu Y., G. Wiggs, and R. Bailey, Numerical simulation of the internal structure of sand dunes using a cellular automaton (ca).
12h20 - 13h30: Lunch
13h30 - 15h00: Poster session: “Dunes and bedforms”, “Planetary aeolian research”, “Coastal environments”, “Modelling and numerical simulations”, “Experiments and instrumentation”.
15h00 - 15h30: ISAR Distinguished Career Award; Lancaster N., Quaternary dune systems – ergs and sand seas revisited.
15h30 - 15h50: Baird T. and P. Vermeesch, Towards a dune celerity map of the Sahara.
15h50 - 16h10: Hay A., M. Powell, A.S. Carr and I. Livingstone, Accommodation space types as a control over aeolian landform development in a topographically complex environment.
Session “Planetary Aeolian research”

16h10 - 16h15: Introduction by conveners: J. Radebaugh and S. Silvestro


16h45 - 17h00: Coffee break

17h00 - 17h20: Chojnacki M., Planetary boundary condition control on Martian bedform mobility.

17h20 - 17-40: Roback K., J.-P. Avouac, K. Runyon and F. Ayoub, Measurement of dune and ripple sand fluxes at active dunes at Nili Patera, Mars.

17h40 - 18h00: Bordiec M., S. Carpy, O. Bourgeois, M. Massé, L. Perret and P. Claudin, Generation of periodic bedforms on Earth and Mars by sublimation of ice under turbulent winds.

18h00 - 18h20: Jia P., B. Andreotti and P. Claudin, Giant ripples on comet 67P/Churyumov-Gerasimenko sculpted by sunset thermal wind.


20h00: Conference Dinner at the Café Maritime

Friday 29th June 2018

Session “Coastal Environments”

9h00 - 9h05: Introduction by conveners: P. Hesp and D. Jackson


9h35 - 9h55: Rotnicka J. and M. Dluzewski, Decadal dynamics of incipient foredunes in a tideless beach setting.


10h35 - 11h00: Coffee break

11h00 - 11h30: Hernández-Calvento L., Arid aeolian sedimentary systems on hot-spot volcanic islands: from the singularity to the paradox. The case of the Canary Islands. Solicited talk.

11h50 - 12h10: **Rotnicka J.**, Aeolian sand transport rate on a beach in relation to the available fetch distance.

12h10 -13h05: **Lunch**

13h05 - 14h55: **Poster session**: “Dunes and bedforms”, “Planetary Aeolian research”, “Coastal environments”, “Modelling and numerical simulations”, “Experiments and instrumentation”.

  **Session “Modelling and numerical simulations”**

14h55 - 15h00: **Introduction by conveners**: J. Nield and A. Valance

15h00 - 15h20: **Fernandes R.,** S. Dupont and E. Lamaud, Investigating the dissimilarity between dust and momentum turbulent transports using large eddy simulation.

15h20 - 15h40: **Huo X.** and N. Huang, Numerical simulations on the emergence of aeolian sand ripples.

15h40 - 16h00: **He P.,** Y. Xu, and N. Huang, Numerical simulations of three-dimensional sand transport under unsteady wind.

  **Session “Experiments and instrumentation”**

16h00 - 16h05: **Introduction by conveners**: M. Louge and G. Wiggs

16h05 - 16h35: **Avouac J.-P.,** F. Ayoub, S. Michel and K. Roback, Measurement of Aeolian bedforms dynamics from time series of optical images. **Solicited talk.**

16h35 - 17h00: **Coffee break**

17h00 - 17h20: **Selmani H.,** A. Valance, A. Ould El Moctar and P. Dupont, Experimental measurements of the relaxation length in aeolian sand transport.

17h20 - 17h40: **Ning Q.** and B. Li, A new laser sheet sensor (LASS) for wind-blown sand flux measurement.

17h40 - 18h00: **Nield J.M.,** M.C. Baddock and G.F.S. Wiggs, Interacting protodunes.

18h00 - 18h20: **Von Holdt J.,** F. Eckardt, G. Wiggs, M. Baddock, and M. Hpondoka, Influence of sampling approaches on physical and geochemical analysis of aeolian dust in source regions.


18h40 - 19h00: **Student Presentation Award and closure of the meeting**