

Workshop “Observers, modelers, and experimentalists – 3-in-1 to better understand impact cratering”

Wednesday April 11th from 9:00 to 13:00
Natural History Museum Vienna (Austria)



Location:

The workshop will take place in the Lecture Hall of the Natural History Museum (Maria-Theresien-Platz, 1010 Vienna).

Please use the main (/visitor) entrance to enter the building and be sure to show a printout of this program at the entrance (or specify that you come for the workshop). The lecture hall is located to the left side of the entrance hall. The wardrobe is located to the right side of the entrance (with lockers if you need to store luggage).

Transportation: (see: http://www.nhm-wien.ac.at/en/information/contact__journey)

The museum can be easily reached by subway [U2 and U3 (station Volkstheater)], tram [1, 2, 46, 49, and 71 (station Dr.-Karl-Renner-Ring)], and bus [48A (station Dr.-Karl-Renner-Ring)].

Program:

9:00 Arrival of the participants (coffee and tea will be served in the Lecture Hall)

9:15 Welcome words by Christian Koeberl (*Director General NHM Vienna & Univ. Vienna*), Norbert J. Mauser (*Director WPI c/o Univ. Vienna*), and Ludovic Ferrière (*NHM Vienna*)

9:25 Shock metamorphism of meteorites: A record of impact cratering events in the planetary system (Jörg Fritz, *Saalbau Weltraum Projekt*)

9:40 Shock metamorphic effects in a common mineral: shocked plagioclase in nature and experiments (Lidia Pittarello, *University of Vienna*)

9:55 A simple cooking recipe for dating impact events (Alex Deutsch, *Universität Münster*)

10:10 Recent advances in tracing meteoritic contributions to the Earth's crust (Steven Goderis, *Vrije Universiteit Brussel*)

10:25 Coffee break

10:55 A brief introduction to numerical impact modelling (keynote talk – Gareth Collins, *Imperial College London*)

11:15 Combining observations of shock metamorphism with numerical impact simulations: Insights into complex crater formation (Auriol Rae, *Imperial College London*)

11:30 Modeling of Pantasma impact crater using Badlands software with Monte Carlo method (Ruken Alac, *University of Sydney*)

11:45 Shooting into stone – What we learned from the MEMIN project (keynote talk – Michael Poelchau, *University of Freiburg*)

12:15 Discussion & Concluding remarks (all participants)

12:30 Tour of the Meteorite Hall (& of the electron microscopy and microanalysis facilities – Optional)

13:00 End of the workshop

This workshop is co-funded by the Wolfgang Pauli Institute as part of the WPI Thematic Programme on “Models in Plasmas, Earth and Space Science”.

