The geology and planetary mapping winter school will address the most recent outcomes on the production of planetary geological mapping. In particular the objectives of the 2022 school will be partly common to the 1st edition, but with some relevant exception.

The 2nd edition of the school will be spread into two weeks, with the first one dedicated to the basic topics and the second to the advanced course and a workshop for the participants of the 1st edition.

In particular the program will be scheduled as follow:
- The Basic Course is dedicated to students with no experience on planetary geological mapping and will last 4 days. The course will alternate theoretical and practical parts in which the concepts/tools learned from frontal lectures will be immediately applied. In particular the Basic Course will be devoted to the theoretical concepts of planetary geological mapping and the practical activities aimed at creating planetary geomorphological maps. At the end of the course a mapping area will be assigned to each participant willing to be part of a larger community mapping project to be carry out in the following months. The final result will be submitted to a dedicated open access Journal such as Journal of Field trips and Maps. At the end of the course, the last half a day will be dedicated to a virtual field trip on Martian environment (available to people with their own headsets).
- The Advanced Course will be dedicated to more expert people, to participants of the 1st edition of the school and to participants of the basic school of the 2nd edition. It will last 3 days and will be subdivided into a theoretical part of two half days and a practical one of two days. The first part will be dedicated to deliver to the participants the needed knowledge about composition of diverse planetary bodies and/or landing site characterization. In the second a basic training for producing geological maps integrated with spectral information or landing site maps will be provided.

All the lectures will be open to any participants, whereas some practicals could be limited in function of the number of available instructors. All the practical activities will be carried out in separate virtual break-out rooms in order to guarantee one instructor every 5-10 students. All the lectures and practical tutorials will be recorded so that the courses can be followed either synchronously and asynchronously. In addition, we are planning monthly telecon for the community mapping project until the maps will be accomplished and submitted.

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<th>Organising institution</th>
<th>Università degli Studi di Padova</th>
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<td></td>
<td>Dipartimento di Geoscienze</td>
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<td>Prof. Matteo Massironi</td>
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<td>Partner Institutions</td>
<td>Jacobs University (Germany)</td>
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<td>Muenster University (Germany)</td>
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<td>Polish Academy of Sciences (PAN) (Poland)</td>
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**Course Title and Description**

2nd Geology and Planetary mapping winter school (II_GPM_WS)

The geology and planetary mapping winter school will address the most recent outcomes on the production of planetary geological mapping. In particular the objectives of the 2022 school will be partly common to the 1st edition, but with some relevant exception.

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**Period**

31/01/2022 – 18/02/2022

**ETCS credits**

6

**Course fee**

N/A

**Course Level**

Bachelor, Master and PhD degree courses