Memorandum of Understanding THIS MEMORANDUM OF UNDERSTANDING (MOU) IS BETWEEN

The Istituto Nazionale di Geofisica e Vulcanologia, hereinafter referred to as "INGV" a public scientific and technological research organization, having its head office at Via di Vigna Murata 605-00143 Roma Italy, and being represented by Prof. Carlo Doglioni, President,

AND

The Berkeley Seismological Laboratory of the University of California Berkeley, hereinafter referred to as "BSL," a department of a public University, having its head office at McCone Hall, Berkeley, CA 94720, and being represented by Prof. Richard Allen, hereinafter referred to as the "Participants" collectively or the "Participant" individually.

INTRODUCTION:

The Participants recognize that cooperation in the field of Earth Sciences is beneficial and wish to maintain a close working relationship to exchange information and collaborate with respect to the research and application of scientific knowledge. The Participants have built cooperative partnership under the Memorandum of Understanding to be entered into effect on April 15, 2023, effective for five (5) years thereafter, and wish to continue the cooperation as described herein. The Participants have reached the following understanding:

Section 1: Purpose

The purpose of this MOU is to define the means of cooperation between INGV and BSL, to facilitate the exchange of scientific and technological information, and to define and implement cooperation on priority subjects defined by INGV and BSL. Under the auspices of the present MOU, the Participants will facilitate the participation of their scientists to projects of mutual interest, aiming to obtain research funds in National and International funding agencies.

The intended areas of research include, but are not limited to:

- a) Global Seismology;
- b) Wave Propagation;
- c) Earthquake Physics;
- d) Active Tectonics:
- e) Geology of Earthquakes;
- f) Theoretical Developments;
- g) High-pressure/High-temperature Laboratory;
- h) Volcanic Processes.

The activities under this MOU are intended to serve and promote the public interest. Participants intend to undertake cooperative activities for peaceful purposes.

Section 2: Action for the Joint Scientific and Technological Cooperation

2.1 INGV and BSL intend to have regular and/or occasional meetings to discuss possible subjects for future cooperation, to review the state of current cooperative projects, and to decide on the forms of cooperation, which may include following:

- a) organization of seminars, symposia or other types of discussions in fields of mutual interest;
- b) scientists/staff/researchers/graduate students exchange, to whom the hosting Participant will, when necessary, provide official affiliation to the hosting institution;
- c) joint research projects of mutual interest.
- 2.2 When INGV and BSL decide on a proposition that leads to mutual benefit based upon this MOU, INGV and BSL intend to jointly work on its implementation.
- 2.3 Participants intend to enter into specific written agreements to clarify and define each cooperative scientific and technological project contemplated by this MOU, including financial arrangements and other terms.

Section 3: Administration

Administration and management of this MOU will be coordinated for INGV by Dr. Luca Malagnini (luca.malagnini@ingv.it), and for BSL by Prof. Richard Allen (rallen@berkeley.edu).

Section 4: Confidentiality

Participants do not expect to exchange any proprietary information under this MOU. If any activities under this MOU would benefit from the use of either Participant's proprietary information, Participants will be concluding a non-disclosure agreement describing obligations and terms associated with the exchange.

Section 5: Intellectual Property Rights

Participants do not expect to create intellectual property under this MOU. If Participants decide that a particular activity may lead to creation of intellectual information, they are expected to consult with each other and therefore enter specific written arrangements.

Section 6: Duration and Amendment

- 6.1 This MOU remains in effect for five (5) years from July 01 2023. This MOU may be amended or extended, either by a new written agreement between both Participants hereto, or by a written addendum. It is hereby stated that whilst amendments to this MOU may be presented on an annual basis, it shall not preclude the submission of proposals for amendment at any other time, should the circumstances require such change.
- 6.2 Either Participant may withdraw from this MOU, provided a written notification of the withdrawal is given to the other Participant at least sixty (60) days prior to the intended withdrawal date.
- 6.3 The expiration of this MOU or one Participant's withdrawal from this MOU does not affect the validity of any contracts or other legally binding agreements in place between the Participants.

Section 7: Conformity to Export Control Laws and Regulations

In transferring goods and/or technologies, each Participant is going to observe the export control laws and regulations of Italy and the USA and will obtain all necessary approvals if required by such laws and regulations.

Section 8: Dispute Resolution

If any of the terms herein are subject to questions of intent or interpretation, or if the Participants identify other issues that are not addressed in this MOU, Participants promise to enter good faith negotiations to resolve such issues.

Section 9: Non-binding Understanding

This MOU does not create any legally binding obligations between Participants.

Signed in duplicate by their duly authorized representatives.

For Istituto Nazionale di Geofisica e Vulcanologia: Prof. Carlo Doglioni President

For Berkeley Seismological Laboratory: Prof. Richard Allen Director

June 1st, 2023