# SPICE

**S**eismic wave **P**ropagation and **I**maging in **C**omplex media: a **E**uropean network

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- What is SPICE?
- Who are the partners?
- What are the project goals and task groups?
- Possible SPICE-CIG connection

# SPICE - Partners

SPICE is an open research and training network funded within the European 6th framework programme (2004-2007)

| Partners in the Marie-Curie Research Training Network |
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| **Ludwig-Maximilians-University Munich**, Germany (Coordinator) |
| **Institute de Physique du Globe**, Paris, France |
| **Istituto Nazionale di Geofisica e Vulcanologia**, Rome, Italy |
| **University of Oxford**, United Kingdom |
| **University of Utrecht**, Netherlands |
| **Swiss Federal Institute of Technology**, Zurich, Switzerland |
| **Ecole Normale Superieure**, Paris, France |
| **Istituto Nazionale di Oceanografia e di Geofisica Sperimentale**, Trieste, Italy |
| **University of Naples**, Italy |
| **Comenius University**, Bratislava, Slovak Republic |
| **Universitetet I Oslo**, Norway |
| **Universität Hamburg**, Germany |
| **National University of Ireland**, Dublin, Ireland |
| **Charles University**, Prague, Czech Republic |

with informal partners and/or collaborative projects with Schlumberger Research, CalTech, RSES Canberra, Trento, ORFEUS, and others

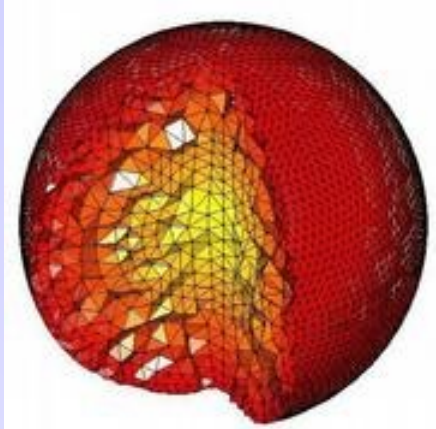
# SPICE: Project goals

- Developement and application of computational tools in all fields of seismology
- Providing training facilities (workshops, practicals, on-line material) that compensates for the lack of training in computational methods in Earth science curriculae
- Assembly of a www-based library with wave propagation algorithms, training material, and simulation data

# Task groups (TG)

**TG electronic library/new methods (Igel, Vilotte)**

www-data base, novel numerical algorithms, grid generation, library with training material and codes



**TG reservoir geophysics (Holliger, Seriani, Chapman)**

reservoir wave propagation, waves in porous media, waves in mushy seafloor

**TG volcanoes (Zollo, Dahm)**

3D wave propagation in volcanic structures (strong topography, internal scattering), seismic sources in volcanoes, tomography

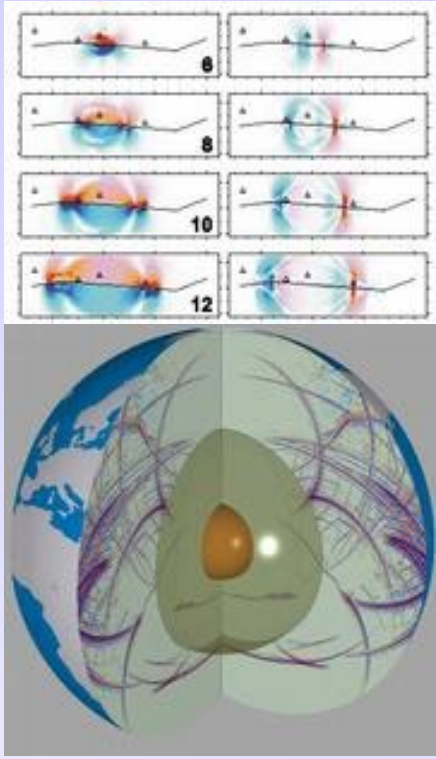

# Task groups (TG)

**TG local scale (Mai, Madariaga, Ampuero)**

dynamic rupture problems, generation of high-frequency ground motion, non-planar faults, plastic behavior, dynamic rupture toolbox, benchmarking

**TG continental and planetary scale (Trampert, Montagner)**

3D modeling tools in global seismology, diffraction tomography, imaging benchmark with 3D seismograms, European reference model



# CIG - SPICE

**SPICE** is focusing on the development of new methodologies and their applications. The funding is for supporting young researchers (PhDs and postdocs) in the field of computational seismology

**Possible links with CIG:**

- Joint development and optimization of computational algorithms for wave propagation
- Joint SPICE-CIG workshops and visitor programs
- Links between www-structures/data bases
- Joint scientific/technical projects