



2nd QUEST workshop
Hveragerdi, Iceland
July 12-19, 2011

Welcome!



... thanks to ...

Monika Bolliger, Bjarnheiður Hallsdóttir, Greta Küppers, Ulli Küppers,
Tarje Nissen-Meyer, Freysteinn Sigmundsson, Oli Gudmundsson, Petr,
(Organization)

Lapo Boschi, Luis Dalguer, Amir Khan, Jo Wassermann, Robert Barsch,
Stefan Wenk (Practicals)

... and the Hotel Örk!

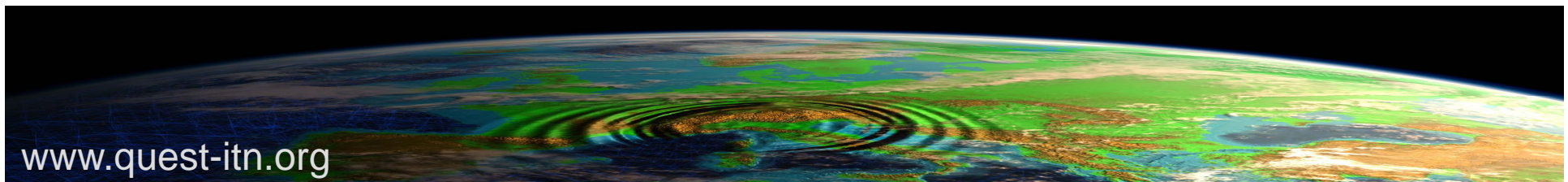


What is QUEST?

- The network
- The work program
- Workshops and training

The workshop programme

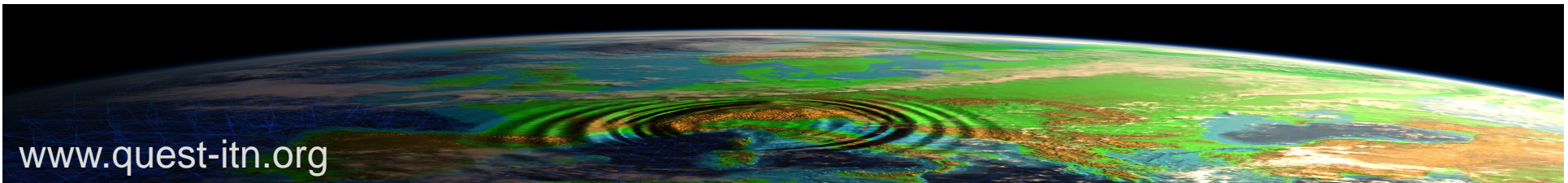
QUEST researchers and projects



What is QUEST?



- Marie-Curie Actions – Human Mobility
- ITN – Initial Training Network
- Promotion of careers in Science
- Improving career opportunities for young researchers
- Early stage and Experienced Researchs in contractual conditions (pension schemes etc.)
- 105 projects funded, approx. 1000 proposals
- 352 Million Euro for all projects

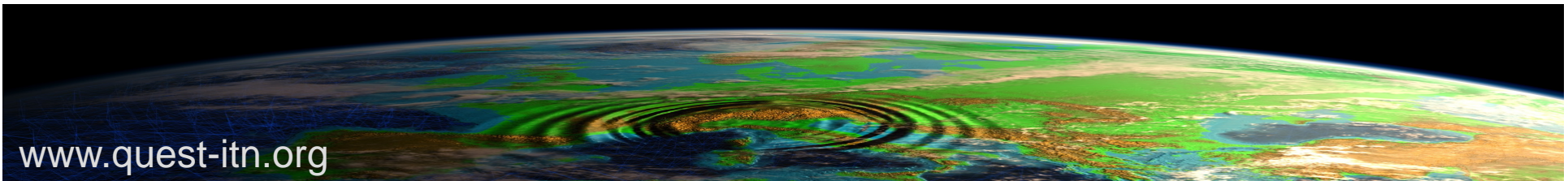


What is QUEST?



Fact sheet

- 15 partners
- 18 PhDs, 8 postdocs
- Budget 5 MEuro
- Duration 4 years, 12/09 – 11/13
- Annual workshops, special sessions



The network

Dublin

Oxford
SCR Cambridge

UEA Norwich

Utrecht

Potsdam

IPG Paris

Prag

LMU München

Bratislava

Zürich, ETH + Spectraseis

Grenoble

OGS Trieste

Bologna

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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46°38'41.01" N 41°17'24.64" O Höhe 81 m

Associates

University of Berkeley

IBM Zurich Research Lab

University of Basel

Los Alamos National Laboratory

Munich Computational Science Centre

MicroseismicInc Houston

University of Western Ontario

Univ. of Nancy

University of Princeton

Ecole Normale Supérieure

Geosciences Azur

RZG Garching/DEISA Project

University of Austin

Tokio University

University of Naples

University of Hamburg

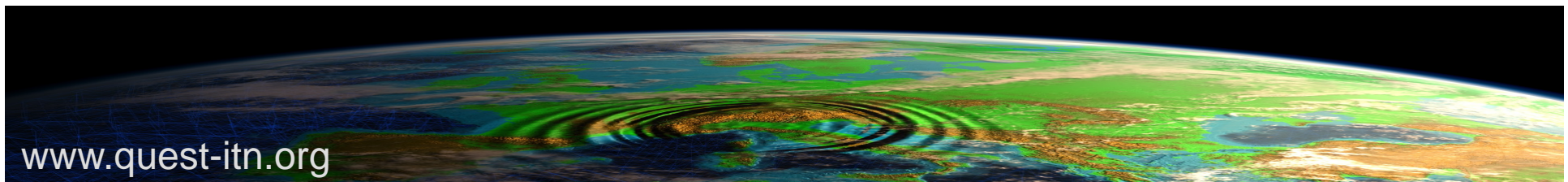
Instituto Andaluz de Geofísica

Australian National University

KAUST

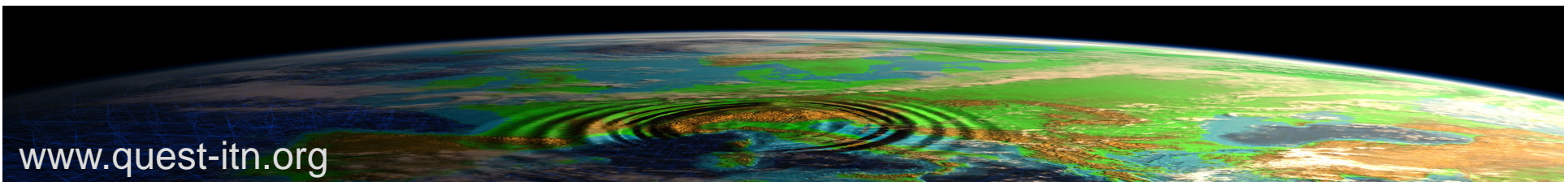
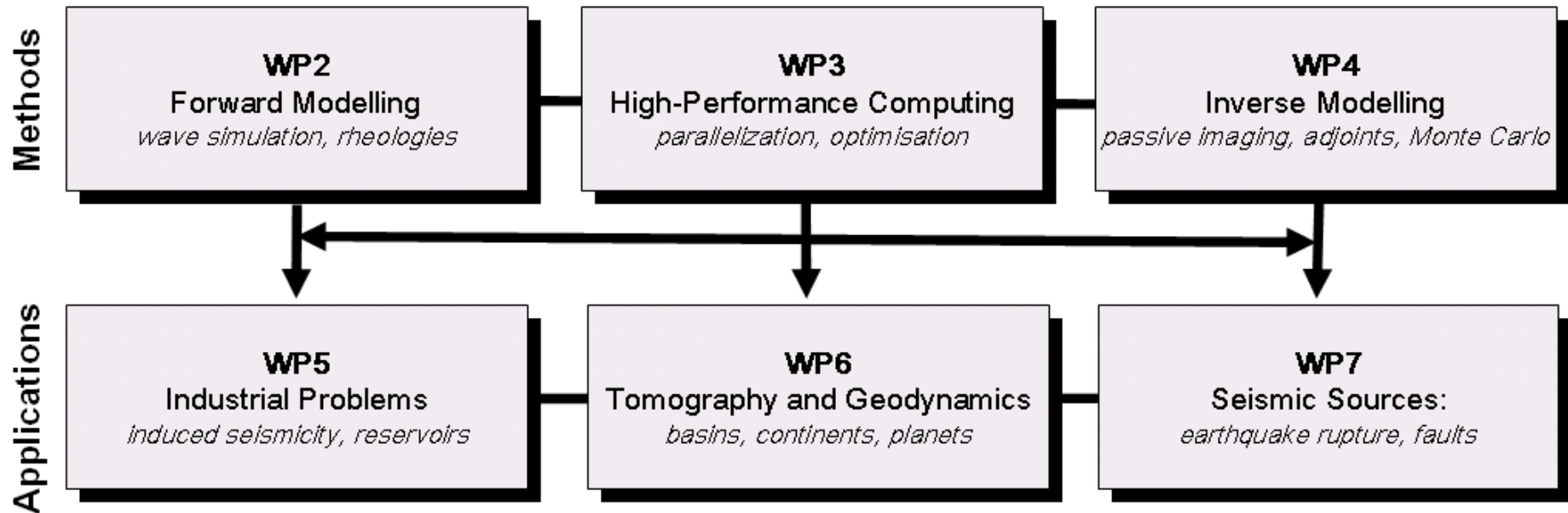
University of Lausanne

University of Cambridge



What is QUEST? *Work Packages*

*QU*antitative estimation of *E*arth's seismic sources and *ST*ructure



What is QUEST? *Workshops*

2010: Sardinia

Introduction to QUEST: Fundamentals of Seismic Imaging
PART I: Who is Who, and Why Are We Collaborating
PART II: Tomographer's Toolbox: Numerical wave simulation codes for forward modelling

2011: Iceland

Data, Data, Data – Inversion
Earthquake source - Iceland

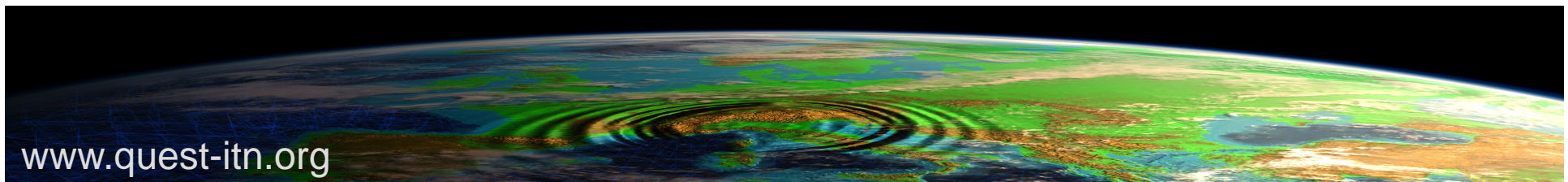
2012: Slovak Republik (High Tatra)

Seismic tomography: ray theory,
banana-doughnut kernels,
and waveform inversion



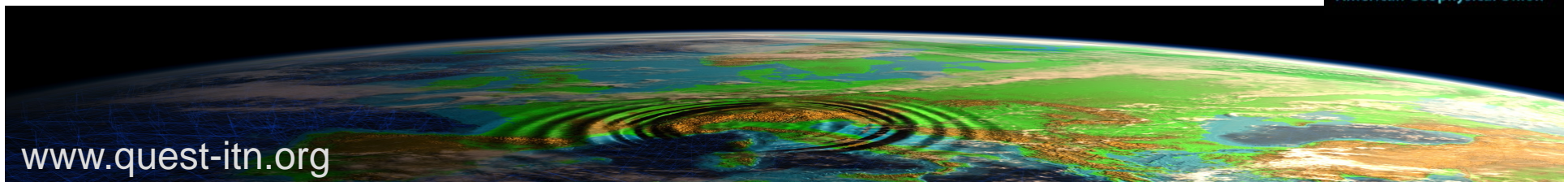
2013: France

The noisier, the better: Imaging with cross-correlation methods,
ambient noise, and coda waves



What is QUEST? *Activities ...*

- 2010** EGU special sessions
Workshop on Rotational seismology
AGU special session
- 2011** Munich Winter School (comp. seismology)
EGU special sessions
Royal Society Workshop (Earthquake sources)
Workshop on Uncertainties (Utrecht)
AGU Stand and Informal Meeting (Utrecht)
- 2012** Munich Winter School (comp. Seismology)
EGU, AGU special sessions
(...)

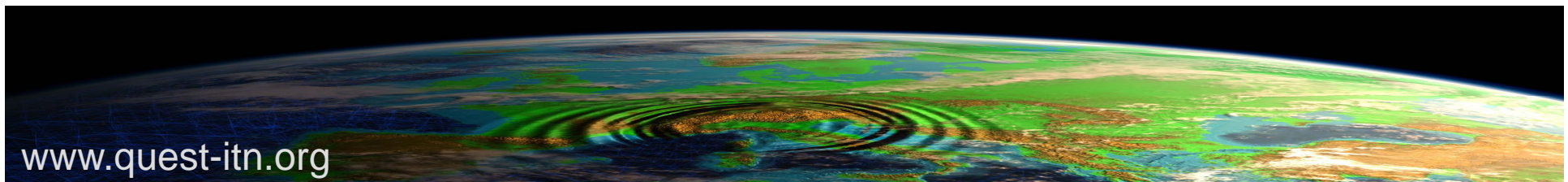


What is QUEST? *Links ...*

QUEST is a follow-up of a previous project SPICE, and joins a number of large scale initiatives in Earth sciences on a European scale

Past SPICE spice-rtn.org
NERIES neries-eu.org
SAFER saferproject.net

Now QUEST quest-itn.org
EPOS epos-eu.org
SHARE share-eu.org
NERA nera-eu.org
PRACE prace-project.eu
VERCE
EUDAT



Mission

Train young researchers in key methodologies relevant for inversion of Earth's structure and earthquake sources

Data, Data Data

Networks, data access, quality, instruments, processing, correlations

Inversion

probabilistic approach, uncertainties, adjoints

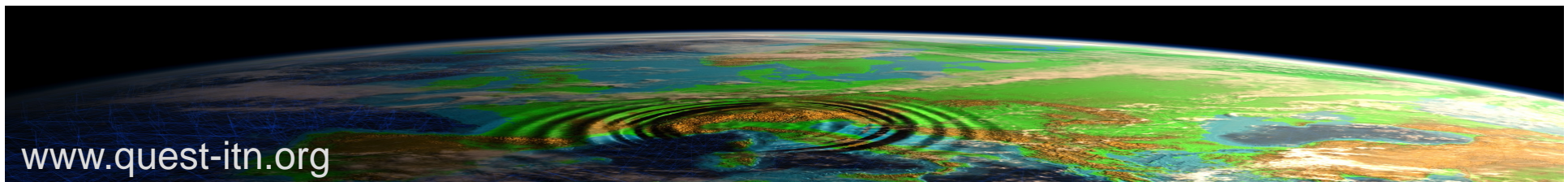
Earthquake source

kinematic and dynamic problems, uncertainties of source inversion

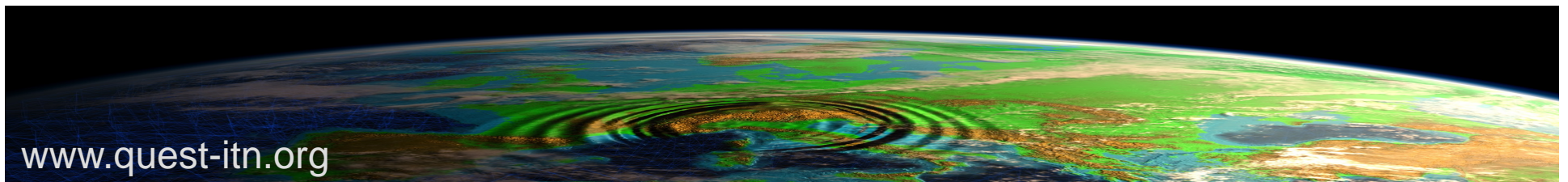
Iceland for theoreticians: a geophysical laboratory

dynamic Earth in the field

... and present the latest **research** in poster sessions and discussions



Programme



Enjoy the workshop!!!

