

Welcome!

4th QUEST workshop
Bénodet, France

May 19 – May 25, 2013

... to Finistère, the end of the world ...



Michel Campillo, Sylvie Contamina, Yann Capdeville, Greta Küppers, Jean-Paul Montagner (Organization), Céline Hadziioannou, Lion Krischer (Practicals), Philip Knaute and all QUEST researchers (programme, pub quiz, etc.), Eric Beucler & friends (music)

... Philippe Beasse and the Hotel Kermoor!

... thanks ...

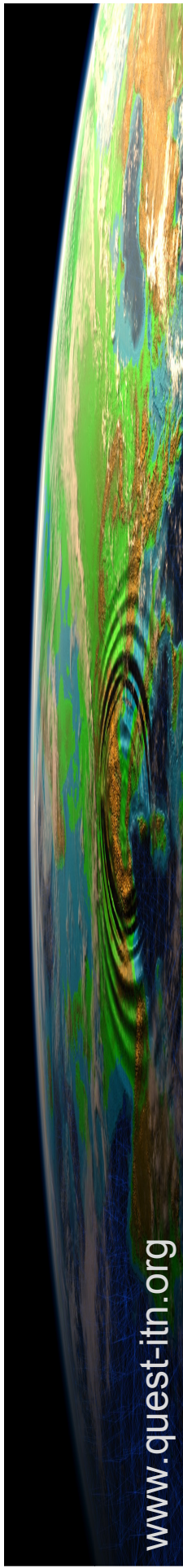




What is QUEST?



- ✦ 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
- ✦ 52 Million Euro for all projects

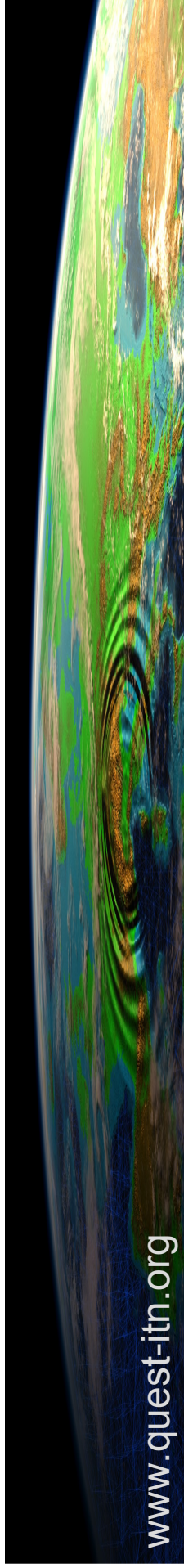


What is QUEST?



Fact sheet

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



QUEST partners

Dublin

Oxford

SCR Cambridge

UEA Norwich

Utrecht

Potsdam

IPG Paris

Prag

LMU München

Zürich, ETH + Spectrasels

Bratislava

Grenoble

OGS Trieste

Bologna

You are here



Image © 2011 DigitalGlobe
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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Image © 2011 TerraMetrics

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](#)

[Univ. of Nancy](#)

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[University of Austin](#)

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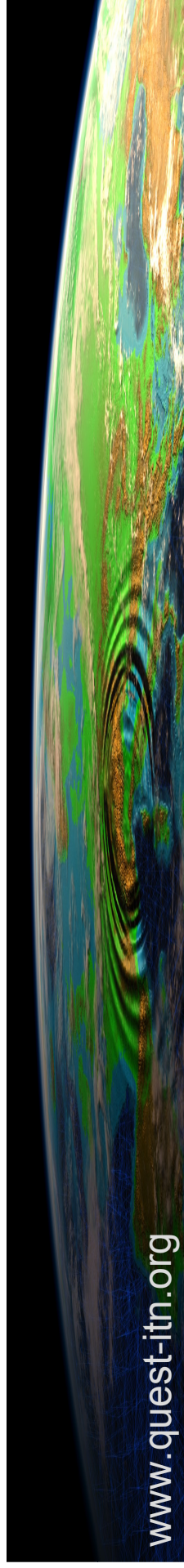
[Instituto Andaluz de Geofísica](#)

[Australian National University](#)

[KAUST](#)

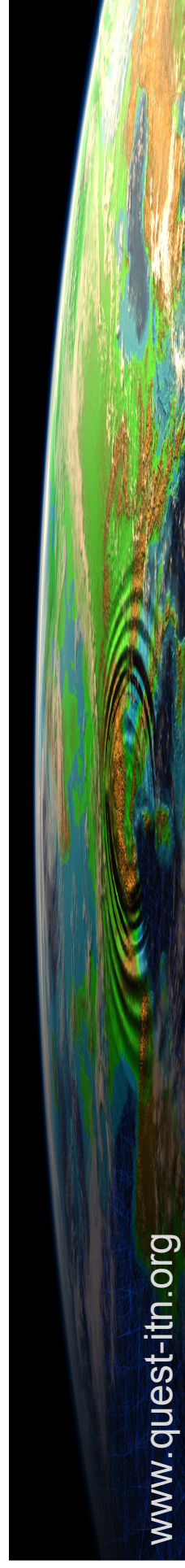
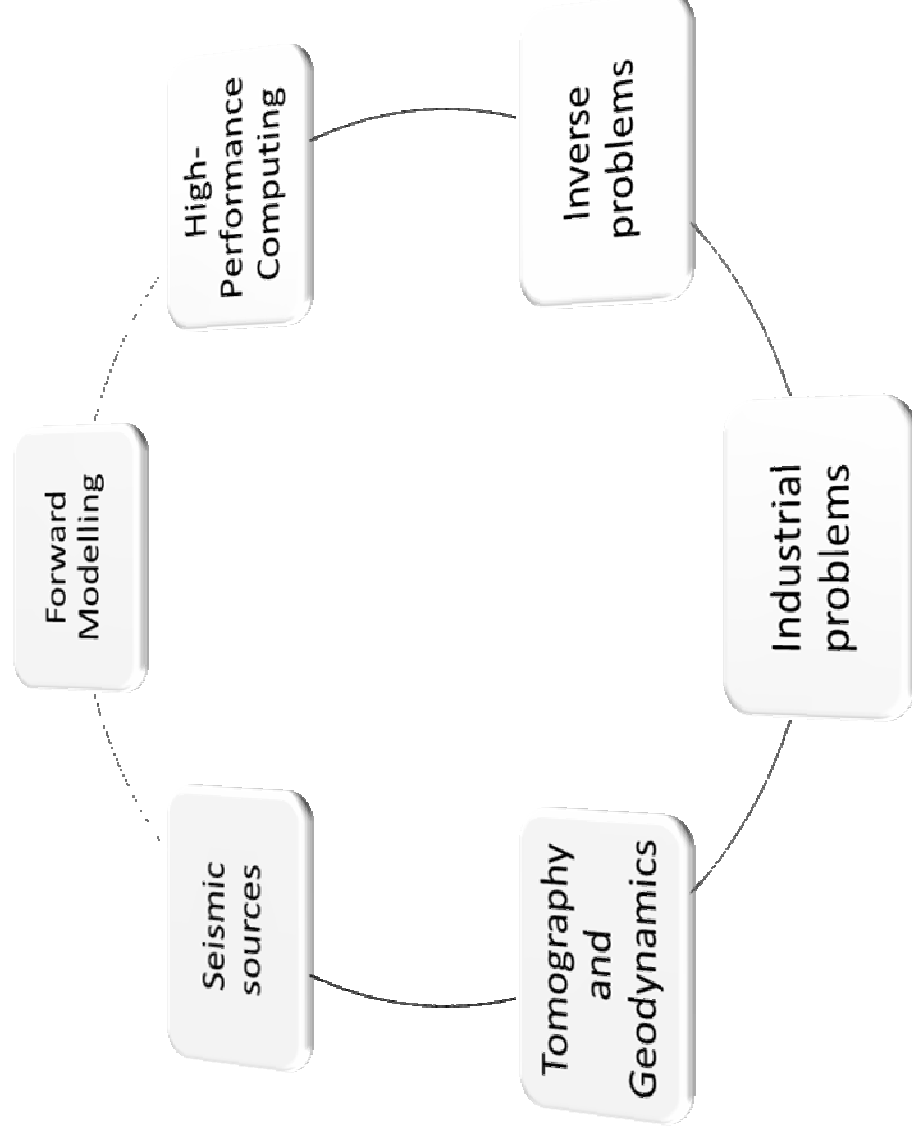
[University of Lausanne](#)

[University of Cambridge](#)



What is QUEST? Work Packages

QUantitative 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



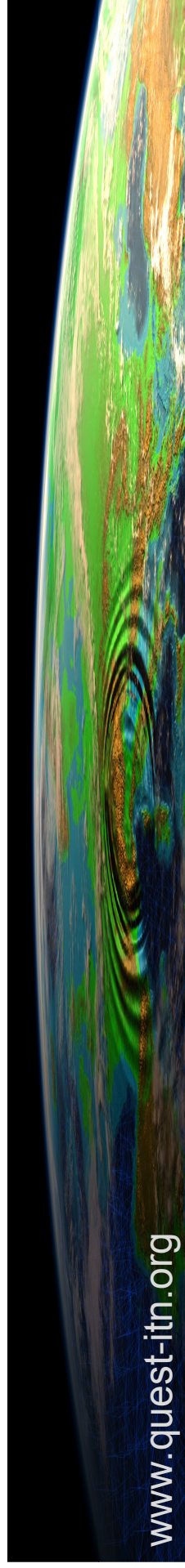
2012: Slovak Republik

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



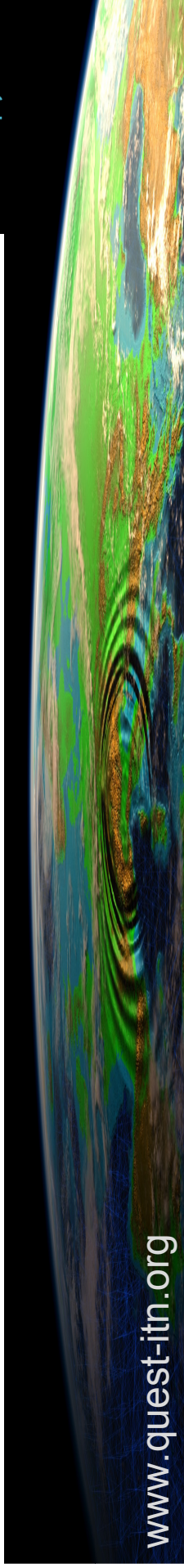
2013: France

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 (ObsPy, comp. seismology)
EGU, AGU special sessions
Ambient noise workshop Neustadt
- 2013** Munich Winter School (ObsPy, comp. seismology)
EGU, special sessions, QUEST-CIG-IRIS Meeting Alaska

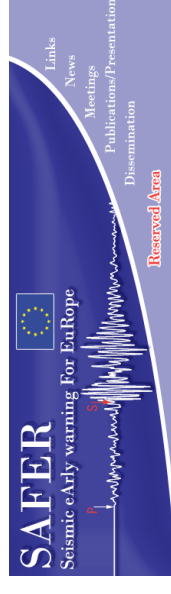


What is QUEST? *Links ...*

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

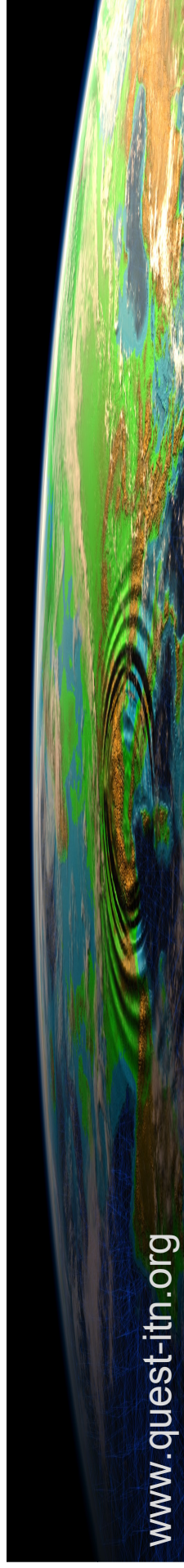
Past

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



Now

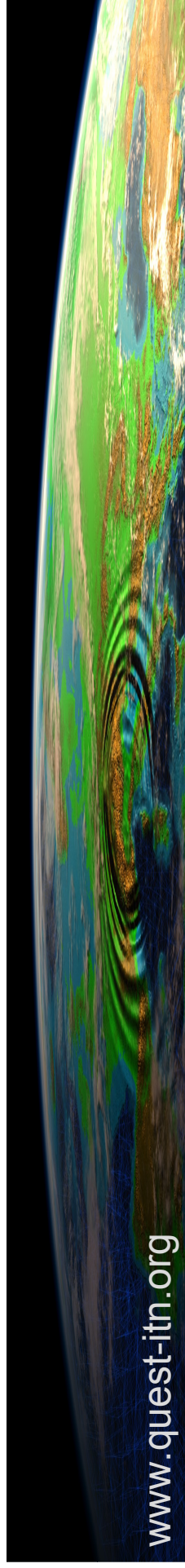
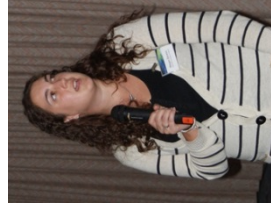
QUEST quest-itn.org
EPOS epos-eu.org
SHARE share-eu.org
NERA nera-eu.org
PRACE prace-project.eu
VERCE verce.eu
WHISPER whisper.obs.ujf-grenoble.fr
EUDAT eudat.eu



What is QUEST? People ...



Basini Piero, Hadziioannou Céline, Morais Iolanda, Satriano Claudio, Schiemenz Alan, Valentine Andrew, Ying Yingzi, Baron Julie, Bernauer Moritz, Colombi Andrea, Dionicio Viviana, Galvez Percy, Gualtieri Lucia, Knaute Philip, Lentas Kostas, Molina Aguilera Antonio, Maria Fernanda Nader-Nieto, Parisi Laura, Poli Piero, Ramos Catalina, Rezanezhad Vahid, Shogenov Kazbulat, Su Chang, Twardzik Cedric, Valentova Lubica, van Driel Martin, Wang Nian, Weemstra Cornelis, Wenk Stefan, Zecevic Megan



Programme philosophy

Monday, May 20th

08:45-09:00 Igel: Workshop Introduction

The noisier the better: Theoretical developments and applications of imaging and monitoring with ambient noise (chairs: Hadziioannou, Weemstra)

09:00-09:30 **Campillo**: Introduction to ambient noise session

09:30-10:00 **Nishida**: Earth's background free oscillations

10:00-10:20 **Stutzmann**: Seismic noise sources

10:20-10:40 **Gualtieri**: Modelling seismic noise by normal mode summation

10:40 Coffee Break

11:10-11:30 **Montagner**: Temporal change of anisotropy in seismogenic zones from noise

11:30-11:50 **Tsai**: Extracting seismic core phases with array interferometry

11:50-12:10 **Poli**: Global body waves from seismic noise correlation: a new dataset to probe the Earth's interior

12:10-12:30 Discussion

12:30 Lunch

Chairs: Gualtieri, Rivet

14:30-15:00 **Ekström**: Noise tomography of North America using USArray

15:00-15:20 **Sens-Schönfelder**: Listen to the Noise: understanding the message of ambient vibrations

15:20-15:40 **Kennett**: Ambient noise studies in Australia and Indonesia

15:40 Coffee Break

16:10-16:30 **Basini**: Ambient noise tomography of Southern California

16:30 **Panel discussion: Ambient Noise (chairs: Gualtieri, Weemstra, Poli, Hadziioannou)**

20:00 Dinner

This workshop!

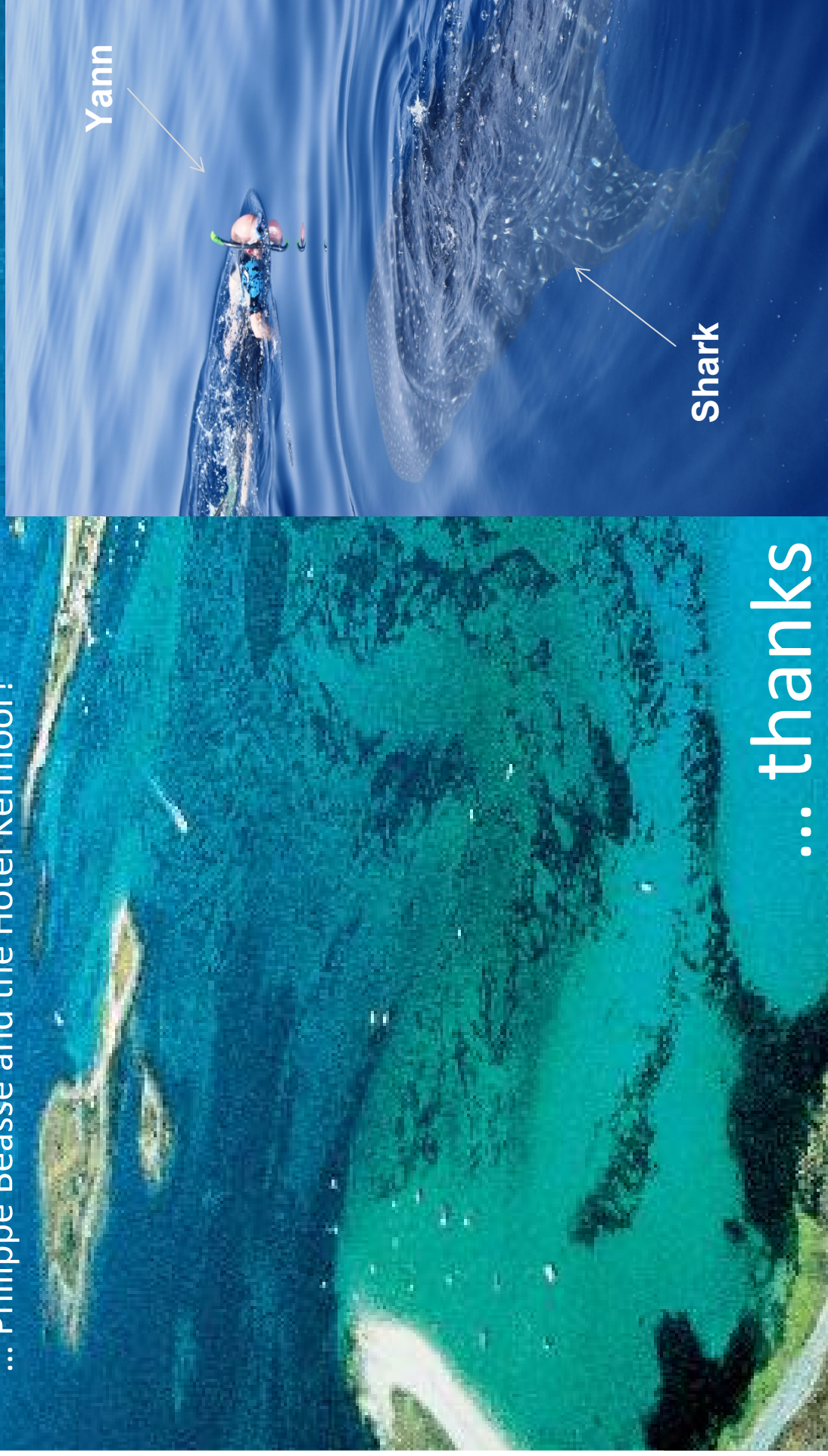
- ◀ First round of posters can go up today, Monday, 2nd round can be put up Wednesday
- ◀ The registration/facility desk (Greta) will be available lunchtime
- ◀ Changes to programme (WED morning)
 - ◀ Archuleta (30 min)
 - ◀ Ashii (30 min)
 - ◀ Vallee (20 min)
 - ◀ Shapiro (20 min)
- ◀ Researcher lunch with Coordinator/Administrator: TUESDAY
- ◀ Splinter rooms available (near pool)
- ◀ Table tennis tournament? (WED afternoon)



Enjoy the workshop!!!

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Yann

Shark

... thanks