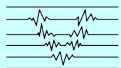


SPIN

MONITORING A
RESTLESS EARTH

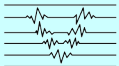
<http://spin-itn.eu>



SPIN MONITORING A
RESTLESS EARTH

Plan

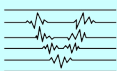
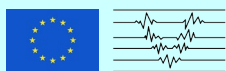
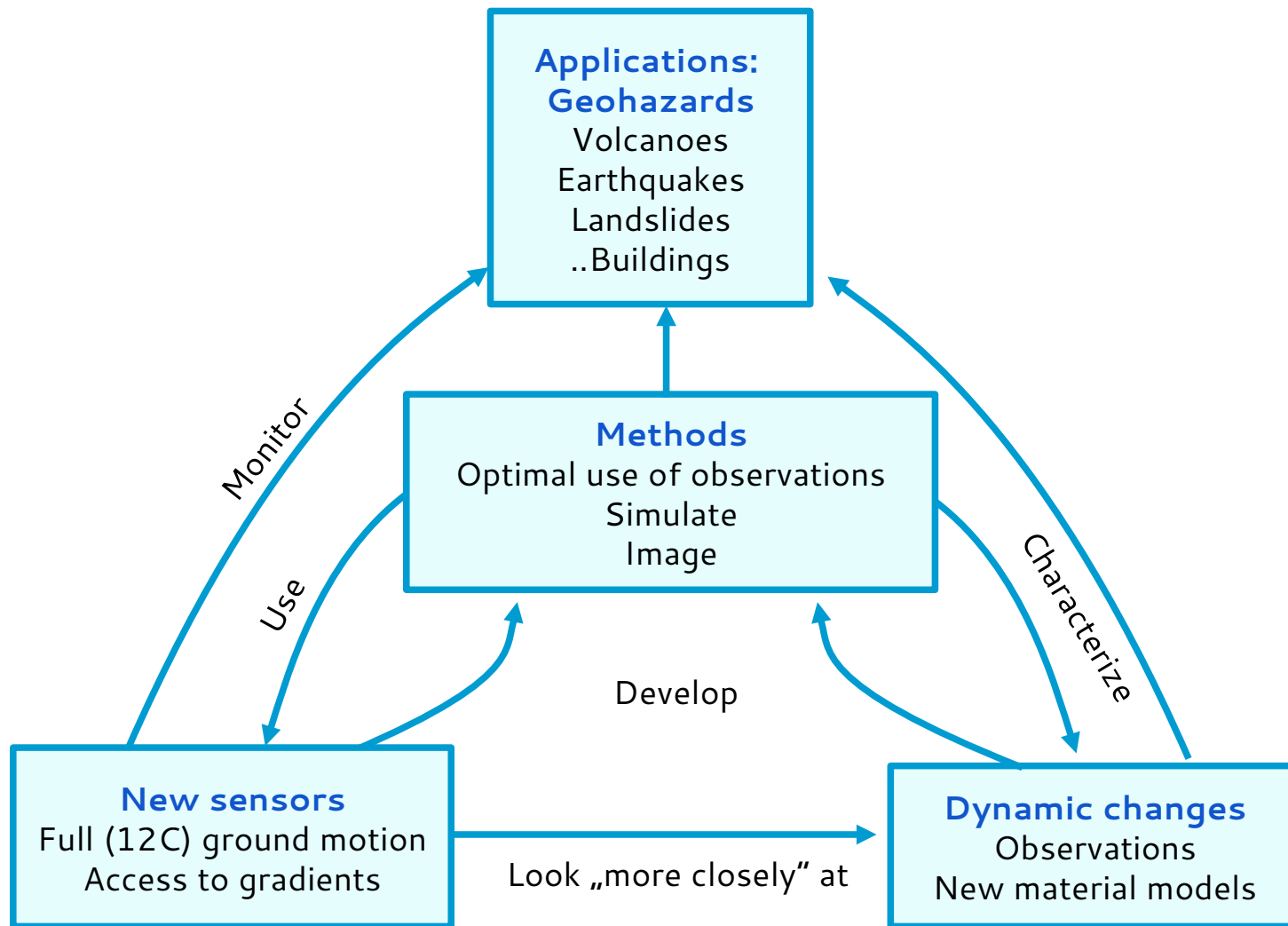
- Context of Work Package 3
- Projects in Work Package 3
- ESR's introduce themselves
- WP3 Questions/Discussion



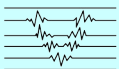
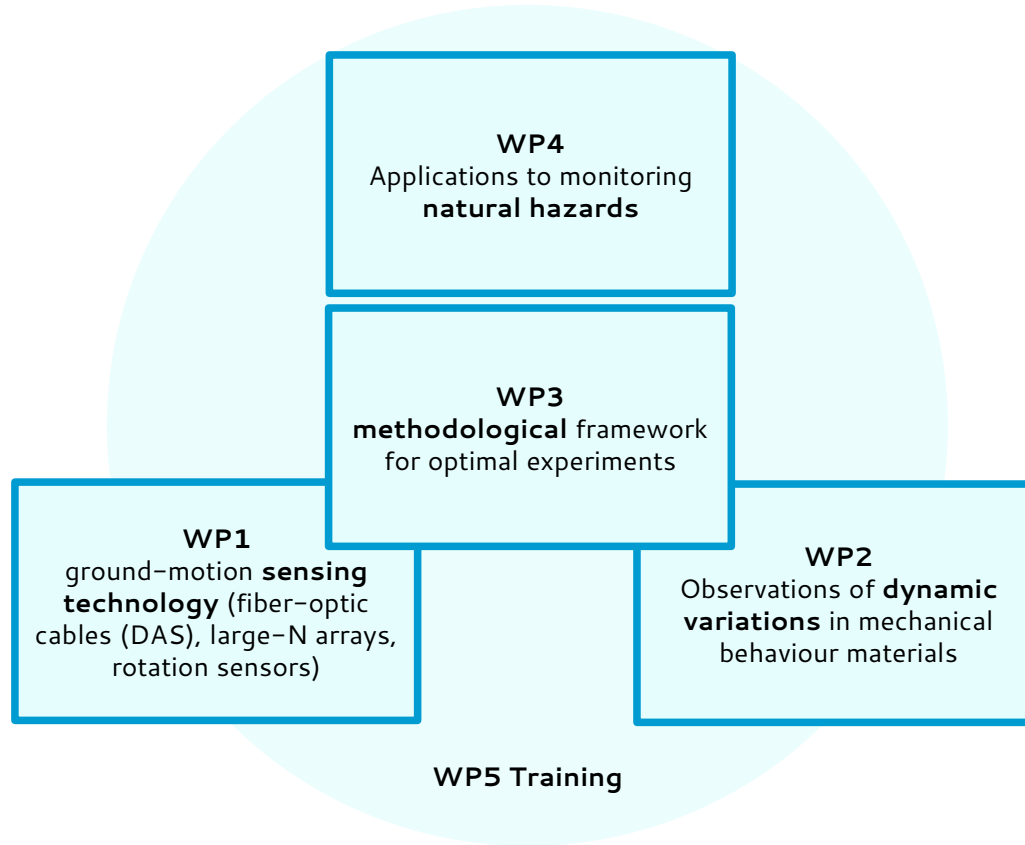
SPIN

MONITORING A
RESTLESS EARTH

SPIN



SPIN – Work Packages



Develop methods and technologies to use/apply/optimize novel information

3.1 Optimal Design Theory

- Design heterogeneous sensor networks
- Minimise Uncertainty – Maximise Information
- Low-D answers from High-D spaces

3.3 Signal Detection using Dense Arrays

- Discover novel signals in high-D data
- Coherence-based + clustering methods
- DAS, dense nodal arrays; faults, volcanoes

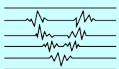
WP3
methodological framework
for optimal experiments

3.2 Numerical Models across Scales

- Wave modelling codes – nonlinear rheology
- Create test-data sets for other SPIN projects
- Interact with 3.1 to optimally design networks

3.4 Ambient Noise & Material Properties

- Locate ambient noise sources
- Distinguish noise from material changes
- Test different types of observables



Develop methods and technologies to use/apply/optimize novel information

3.1 Optimal Design Theory

- Design heterogeneous sensor networks
- Minimise Uncertainty – Maximise Information
- Low-D answers from High-D spaces

3.3 Signal Detection using Dense Arrays

- Discover novel signals in high-D data
- Coherence-based + clustering methods
- DAS, dense nodal arrays; faults, volcanoes

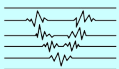
WP3
methodological framework
for optimal experiments

3.2 Numerical Models across Scales

- Wave modelling codes – nonlinear rheology
- Create test-data sets for other SPIN projects
- Interact with 3.1 to optimally design networks

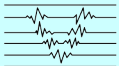
3.4 Ambient Noise & Material Properties

- Locate ambient noise sources
- Distinguish noise from material changes
- Test different types of observables



Discussion (continued tomorrow)

- Any Questions?
- Which specific methods/technologies/codes would **you** like?
- What recent developments should WP3 people be aware of?
- Any new aspects on the horizon?



SPIN

MONITORING A
RESTLESS EARTH