## TeMaS workshop Synthetic Volcano Geophysical Laboratory



Time: October, 7-9 2020 Venue: Golf- und Landhotel Rheinhessen, Hofgut Wißberg, 55578 St. Johann bei Mainz <u>https://www.golfhotel-rheinhessen.de/</u> Note: It is easiest to get here by car

## **List of Participants**

Last name	Name	Affiliation	Email
Baumann	Tobias	JGU Mainz	baumann@uni-mainz.de
Castro	César	GU Frankfurt	castro@geophysik.uni-frankfurt.de
Hering	Philipp	GU Frankfurt	phhering@geophysik.uni-frankfurt.de
Junge	Andreas	GU Frankfurt	junge@geophysik.uni-frankfurt.de
Kaviani	Ayoub	GU Frankfurt	kaviani@geophysik.uni-frankfurt.de
Kaus	Boris	JGU Mainz	kaus@uni-mainz.de
Komeazi	Abo	GU Frankfurt	komeaz@gmail.com
Reiss	Miriam	GU Frankfurt	reiss@geophysik.uni-frankfurt.de
Spang	Arne	JGU Mainz	arspang@uni-mainz.de
de Siena	Luca	JGU Mainz	ldesiena@uni-mainz.de
Zhang	Yi	JGU Mainz	zhang9@outlook.de

## **Preliminary Program**

	Wednesday (10/7)	Thursday (10/8)	Friday (10/9)
8:00-8:30		Breakfast	Breakfast
08:30-10:30		Generating signals from	Breakout session:
		forward models	code coupling
10:30-11:00		Coffee Break	Coffee Break
11:00-12:30		Generating signals from	Breakout session:
		forward models	code coupling
12:30-13:30		Lunch	Lunch
13:30-15:00		Breakout sessions (2+ groups	Final discussion and
		try to link their models)	farewell
15:00-15:30	Arrival/Coffee	Coffee Break	
15:30-18:30	Welcome,	Presentation of results	
	minipresentations		
18:30-	Dinner	Workshop Dinner	

## 1 Mini-presentations (preliminary titles, please send updates to Boris)

We will kick of the meeting with everyone briefly (~20 min) explaining the others what they can compute from the provided synthetic volcano model and how this is done in practice.

What we are after is the following question: If our 3D volcano model is the reality, how would your observable signal look like? How do you (forward) compute this? We realize that this may depend on local EQ sources, station spacing etc. etc. Yet, being able to compute the signal synthetically will help us to see where combining different approaches could be helpful, and will also allow us to link our results with what others obtain from petrology, geochemistry etc.

Presenters	Title
Kaus & Spang	Model setup & using geodynamic codes to compute uplift & gravity
	anomalies
Junge & César	MT techniques to image the volcano
De Siena & Zhang	Computing ambient noise signals
Kaviani & Komeazi	Seismic tomography & waveform modelling
Reiss & Hering Local EQ focal mechanisms and seismic anisotropy signals	

After the first introduction, we plan to spend the rest of the workshop to actually do it, and ideally test a few different scenarios. This is mostly a hands-on workshop and we will make most progress if you have sorted out technical details (such as how to import the 3D data into your codes, or how to remotely run your models) prior to the workshop.