



## TOOLS, DATA AND MODELS FOR 3D SEISMOTECTONICS: THE ITALIAN OVER TIME LABORATORY

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### A “CRUST” INTERDISCIPLINARY WORKSHOP IN MEMORY OF GIAMPAOLO PIALLI

July 9<sup>th</sup> – 10<sup>th</sup> 2019, Perugia, Italy



### **Second Circular**

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The acronym **CRUST** stands for “Centro InterRUниверситario per l’Analisi SismoTettonica tridimensionale con applicazioni territoriali”. **CRUST** is an Italian Interuniversity Center aimed to promote research and teaching in the field of Seismotectonics, meant as the analysis of long-term and present tectonic processes operating at a wide range of temporal and spatial scales, in order to understand seismogenic process controlling seismic hazard.



## Presentation and aims

The “**CRUST**” meeting in memory of Piali has the main purpose to solicit and promote new researches and collaborations among structural geologists and geophysicists in the field of Seismotectonics, at local and regional scales, following the pioneer interdisciplinary route adopted by Giampaolo Piali and his earlier collaborators since the early 80s.

Giampaolo was an open-minded and inclusive researcher, always open to dialogue and discussion and interested in the use of multidisciplinary approaches working at different scales for the solution of geological problems. These are also the traits and the salient features of the CRUST, the Italian inter-university center for seismotectonics which involves 12 Italian Universities with the common aim to better understand earthquake/faults interactions and to build a realistic 3D unified structural-seismotectonic representation of Italy. This model is finalized to a better evaluation of the seismic hazard and risk reduction.

The workshop will consist of **two-day conference** and is aimed to favor exchanges of ideas and opinions between Italian and foreign geologists and geophysicists who operate on active tectonics, seismotectonics and seismogenesis using different methodologies, with different spatial and temporal scales.

We look forward for presentations on 3D geometry, kinematics and dynamics of Italian Quaternary faults and earthquakes and their structural representation, at both local and regional scale. At the same time, presentations on earthquake geology and seismology, tectonic geodesy, overtime and present-day stress and deformation, modeling of crustal architecture and dynamic are highly welcome. Innovative approaches and new data aiming at developing novel ideas are particularly encouraged.

The Workshop is **free of charge** and will be held on 9<sup>th</sup> and 10<sup>th</sup> July 2019 in Perugia. The deadline for the abstract submission is **extended to 26<sup>th</sup> April 2019** (see Abstract submission section). The official languages of the event are English and Italian (both abstract and presentations).

After the First Circular, we received many adhesions to the meeting and several requests for both oral and poster presentations. Given the limited time space, it will be not possible to satisfy all the oral presentation requests, and therefore, most of them will be moved to Poster presentation. This session will include a competition for the **Best Poster**, where the participants will present their work in 3 minutes and will be judged by a scientific Commission composed by three members (see **Poster competition section** for further details).

The final Scientific Program will be defined after the submission of the abstracts. The workshop will be preceded by a CRUST plenary assembly, that will be hold the afternoon of 8 July.

As the conference will take place a few days before the **Umbria Jazz festival** (<http://www.umbriajazz.com/>), we recommend to make hotels reservation in large advance. We suggest to book the accommodation at the time of the abstract submission.



## **Main topics of the workshop**

- Seismic monitoring
- seismic source
- stress strain distribution
- Active tectonics
- Seismotectonics
- 3D fault model building and surface reconstruction
- surface faulting and fracture
- Quaternary basins
- Seismic site effects
- Geodesy
- gravimetry
- seismic tomography
- numerical and probabilistic models

## **ABSTRACT submission**

Participants are invited to present their contributions in oral or poster form. The contributions are expected in English or in Italian and can be presented orally or as a poster, based upon a selection by the Scientific Committee.

Abstract must be communicated using the Abstract Form and submitted to [massimiliano.porreca@unipg.it](mailto:massimiliano.porreca@unipg.it) by **26<sup>th</sup> April 2019**. In the same Form, the presenter Author will also communicate the participation of the other authors to the Workshop, and the participation to the Poster Competition.

## **Instructions for Poster presentation**

1. Poster dimensions: A0 format (1189 mm x 841mm), in vertical format.
2. Authors may distribute short explanatory texts, previously printed by themselves in A4 or A3 format.
3. On the morning of 9<sup>th</sup> July 2019, the authors will register at the workshop secretariat, collect the poster number and arrange the placement on the assigned panel.

## **Additional information for the Poster participating to the Competition (1st CRUST award)**

1. The posters, necessarily written in English, must present original researches and must not have already been presented at previous meetings.
2. In addition to the hard copy of the poster, a copy in PDF format must be delivered to the conference secretariat upon registration on the morning of 9th July or sent by e-mail in the previous days. The PDF will be published in the archive on the CRUST website, subject to the authorization by the first Author.
3. The poster must be briefly presented by the first author, or his delegate, during an oral session of the workshop dedicated to the very brief presentation of the posters (3 minutes each and up to 3 power point slides)



## BEST POSTER COMPETITION

At the CRUST Workshop, special attention will be devoted to the Poster session. To this aim the organizers have planned a competition for young researchers to promote new ideas and to encourage in-depth exchanges of information. The Poster session will start with a set of short oral presentations of about 3 minutes dedicated to researchers participating to the competition.

A grant of up to € 2000 is awarded to the best poster presented, as first author, by **PhD students or researchers within 10 years of completion of their of PhD**. The grant fund should be spent to participate, with an oral or poster presentation, to an international scientific meeting and should be used for travel, accommodation costs or registration fees within the next two years. If the first author should be unable to attend another co-author is eligible to receive this fund.

The poster will be evaluated in terms of its interdisciplinarity, innovativeness and graphics (readability, clarity and appealing). A qualified international commission of 3 members will select the winner.

All the researchers who intend to participate to the Poster Competition must to fill the Form for the Best Poster (i.e. "**Domanda di partecipazione**" attached to this Circular) and to send it to [massimiliano.porreca@unipg.it](mailto:massimiliano.porreca@unipg.it) by **26<sup>th</sup> April 2019**. The details to submit an abstract to participate to the competition are reported in the "**Bando per il 1° Premio Scientifico CRUST**" attached to this Circular and available at the CRUST Workshop website.

We hope to receive a large participation to the poster competition.

For any further information about the Poster competition and support to complete the Form (*Domanda di Partecipazione*), please contact: [massimiliano.porreca@unipg.it](mailto:massimiliano.porreca@unipg.it), [rita.denardis@unich.it](mailto:rita.denardis@unich.it), [myriam.caratu@unipg.it](mailto:myriam.caratu@unipg.it)

### Scientific committee

Giusy Lavecchia (Head of CRUST, University of Chieti)  
Massimiliano Barchi (University of Perugia)  
Roberto Scarpa (University of Salerno)  
Massimo Mattei (University of Roma Tre)  
Francesco Brozzetti (University of Chieti)  
Marco Menichetti (University of Urbino)  
Giorgio Minelli (University of Perugia)

### Contact information

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## Preliminary program

### Tuesday, 09 July 2019

08.30-10.00	Registration	Inscription and welcome coffee
10.00-10.45	Opening and Commemoration of Prof. Pialli	Greetings from the Authority
10.45-11.30	Scientific Introduction to the Workshop from G. Lavecchia (first Pialli's student and Head of CRUST)	"Structural geology for Seismotectonics: a forty year-long journey started with Giampaolo Pialli"
11.30-13.30	Oral session	Session 1: Observational seismology for seismotectonics and earthquake mechanics
13.30-15.00	Lunch	Buffet (Chiostro di S. Pietro)
15.00-16.00	Poster session	Short presentation of Posters participating to the competition for the Best Poster
16.00-16.30	Coffee break	
16.30-18.30	Oral session	Session 2: Observational seismology for seismotectonics and earthquake mechanics
18.30-20.00	Poster session	Visit to Posters exposition and Appetizer

### Wednesdays, 10 July 2019

08.30-10.30	Oral session	Session 3: Active tectonics and surface faulting
10.30-11.00	Coffee break	
11.00-13.00	Oral session	Session 4: Geophysical data and modelling for seismotectonics
13.00-14.00	Lunch	Buffet (Chiostro di S. Pietro)
14.00-16.00	Oral session	Session 5: 3D seismotectonics from interdisciplinary approaches
16.00-16.30	Coffee break	
16.30-18.30	Conclusions	Award for the Best Poster Round table and final discussion

NOTE: *It will be possible to visit the Complex of S. Pietro Basilica during the Workshop.*



## Important dates

Abstract submission	<b>26<sup>th</sup> April 2019 (new deadline)</b>
CRUST plenary assembly	8 July 2019
Workshop	9-10 July 2019

## WEB site

<https://www.crust.unich.it/memory-giampaolo-pialli>

## Venues and times

The Workshop will be held in Perugia (Italy) from **9<sup>th</sup> to 10<sup>th</sup> July 2019** in the fascinating location of the **San Pietro** complex, which includes the basilica, three cloisters, the bell tower and several buildings that embody the monastery, the Department of Agriculture of University of Perugia (<http://dsa3.unipg.it>), and the seismic observatory "Andrea Bina".



S. Pietro complex (Perugia), the bell tower.

## Perugia map and location of the Workshop (Abbazia di S. Pietro)



Abbazia di S. Pietro

Borgo XX Giugno, 74 - Perugia

## Accommodation in Perugia

### Hotels

ALBERGO AURORA Viale Indipendenza 21 - 06121 – Tel. 075 5724819

ALBERGO FORTUNA Via Bonazzi 19 - 06123 - Phone n. 075 5722845

ALBERGO GRIFONE Via Silvio Pellico 1 - 06126 - Phone n. 075 5837616

ALLA POSTA DEI DONINI Via Deruta - Fraz. San Martino in Campo 43 - 06132 - Phone n. 075 609 132

ALLA POSTA DEI DONINI Via Deruta - Loc. San Martino in Campo 43 - 06132 - Phone n. 075 609 132

ANNA Via dei Priori 48 - 06123 - Phone n. 075 5736304

ARTE HOTEL Strada Trasimeno Ovest 159/11 - 06132 - Phone n. 075 5179247

CASA MONTERIPIDO Via Monteripido 8 - 06125 - Phone n. 075 42210

CASTELLO DELL'OSCANO Strada Forcella 37 - 06134 - Phone n. 075 584371

CASTELLO DI MONTERONE Strada Montevile 3 - 06126 - Phone n. 075 5724214

CENTRO MATER GRATIAE Str. San Galigano-Santa Lucia 12/A - 06125 - Phone n. 075 5848195

DECO HOTEL Via Del Pastificio 8 - PONTE SAN GIOVANNI - 06135 - Phone n. 075 5990950

DOMO Strada dei Cappuccinelli 3/A - 06125 - Phone n. 075 7930601

ETRUSCAN CHOCOHOTEL Via Campo di Marte 134 - 06124 - Phone n. 075 5837314

GIARDINO Via A.Manzoni 131 - PONTE SAN GIOVANNI - 06135 - Phone n. 075 5990710

GIUSY Via Firenze 88 - FERRO DI CAVALLO - 06127 - Phone n. 075 5051221

GOLF HOTEL QUATTROTORRI Via Corcianese 260 - 06132 - Phone n. 075 5171722

HOLIDAY INN PERUGIA Via del Discobolo 42 - 06132 - Phone n. 075 5172347

HOTEL ASTOR Piazza Vittorio Veneto 1 - 06124 - Phone n. 075 5006843

HOTEL AUGUSTA Via dei Prati 5 - PONTE SAN GIOVANNI - 06135 - Phone n. 075 5990033

HOTEL BARONE Via Tuderte 20/p - 06126 - Phone n. 075 5837650

HOTEL BONAZZI Via Bonazzi 55 - 06121 - Phone n. 075 5727701

HOTEL BRUFANI PALACE Piazza Italia 12 - 06121 - Phone n. 075 5732541

HOTEL EDEN Via C.Caporali 9 - 06123 - Phone n. 075 5728102

HOTEL EUROPA Viale Pompeo Pellini 19 - 06124 - Phone n. 075 5726883

HOTEL IDEAL Via Tuderte 1/G - 06126 - Phone n. 075 30869

HOTEL IDEAL DIPENDENZA Via Tuderte 1/N - 06126 - Phone n. 075 30869

HOTEL IRIS Via Marconi 37 - 06121 - Phone n. 075 5720259

HOTEL MANZONI Via Manzoni 170 - PONTE SAN GIOVANNI - 06135 - Phone n. 075 394847

HOTEL PRIORI Via Vermiglioli 3 - 06123 - Phone n. 075 5723378



HOTEL ROSALBA Via del Circo 7 - 06121 - Phone n. 075 5728285

HOTEL S. ERCOLANO Via del Bovaro 9 - 06122 - Phone n. 075 5724650

HOTEL SACRO CUORE Via del Brozzo 12 - 06126 - Phone n. 075 33141

HOTEL SIGNA Via del Grillo 9 - 06121 - Phone n. 075 5724180

HOTEL TEVERE Via M. Bochi 14 - PONTE SAN GIOVANNI - 06135 - Phone n. 075 394341

HOTEL TIRRENUS Via Tuderte 75/O - MONTEBELLO - 06126 - Phone n. 075 38200

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I LOGGI Via Lambruschini 69/71 - 06126 - Phone n. 075 5837607

IL CASTELLACCIO Strada Eugubina 345 - 06134 - Phone n. 075 603104

IL CIGNO Via Firenze 84 - FERRO DI CAVALLO - 06127 - Phone n. 075 5051221

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LA ROSETTA Piazza Italia 19 - 06121 - Phone n. 075 5720841

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NYERS Via Caboto 6 - FERRO DI CAVALLO - 06127 - Phone n. 075 5010795

PARK HOTEL Via A. Volta 1 - PONTE SAN GIOVANNI - 06135 - Phone n. 075 5990444

PERUGIA GRAND HOTEL Ponte Resina 1/A/22 - PONTE PATTOLI - 06134 - Phone n. 075 5949000

PERUGIA PLAZA HOTEL Via Palermo 88 - 06129 - Phone n. 075 34643

PERUSIA E LA VILLA Via Eugubina 42/bis - 06122 - Phone n. 075 5730973

PRIMAVERA MINI HOTEL Via Vincioli 8 - 06123 - Phone n. 075 5721657

RELAIS DELL'OLMO Str. Olmo-Ellera 4 - 06132 - Phone n. 075 5173054

RELAIS SAN CLEMENTE Passo dell'Acqua 34 - BOSCO - 06134 - Phone n. 075 5915100

RESIDENZA FONTANELLE Via Montepulciano 24 - 06129 – Tel. 075 505 5526

SAN SEBASTIANO Via S.Sebastiano 4 - 06123 - Phone n. 075 5727865

SANGALLO PALACE HOTEL Via Masi 9 - 06121 - Phone n. 075 5730202

SILVER HOTEL Via Don Dario Pasquini 10/12 - OLMO - 06132 - Phone n. 075 5172491

SIRIUS HOTEL Via P. Guardiano 9 - 06131 - Phone n. 075 690921

STELLA Via dei Narcisi 47 - 06126 - Phone n. 075 6920089

STELLA DIPENDENZA Via dei Narcisi 57 - 06126 - Phone n. 075 6920089

VEGA HOTEL Strada Montalcino 2/A - PONTE VALLECEPPI - 06134 - Phone n. 075 6929534

## **Agriturismi**

Agriturismo "Ai Prati" - Str. Tiberina Nord 70/a 06080 - Tel. 075691678 - cell. 3485927537 - fax 0755919763

### **AGRIGOLF**

Via G. Galilei 13/A - CAPOCAVALLO - 06073 - CORCIANO Phone n. 335 6356271

### **AGRILIA**

Str. Montebello 2 - PONTE PATTOLI - 06134 - Phone n. 075 694897

### **AGRITURISMO FANCIULLATA**

Strada Vicinale del Pino 7 - 06053 - DERUTA Phone n. 075 974833

AGRITURISMO ANIMALI E NATURA Via Borgogiglione 1 - MANTIGNANA - 06074 - CORCIANO Phone n. 335 454653

### **AGRITURISMO CASAMANZA**

Str. di Casamanza - Loc. Montelaguardia 4/F - 06125 - Phone n. 075 5899613

### **AGRITURISMO COPPO**

Strada del Piccione 3 - RAMAZZANO - 06134 - Phone n. 338 4528896

### **AGRITURISMO ILARIA CAPORALI**

Strada Ponte Felcino - Ponte Pattoli 44/b - PONTE PATTOLI - 06134 - Phone n. 347 1222191

### **AGRITURISMO LA MONTAGNOLA**

Via dell'Acquedotto Loc. Caprareccia 10 - 06089 - TORGIANO Phone n. 075 9880048

### **AGLI ZOCCOLANTI**

Strada dei Corbari 1 - CASTEL DEL PIANO - 06132 - Phone n. 075 5159186

## **Bed & Breakfast**

### **AI COLLI DEL TEZIO**

Via dei Piantoni - Loc. Canneto 7 - 06131 - Phone n. 075 690575

### **AL CASTELLO DI RIPA**

Via Lombardia 27 - RIPA - 06134 - Phone n. 349 6079120

### **AL POGGIO BELLAVISTA**

Via XX Settembre 19/a - 06121 - Phone n. 075 5736723

### **ALLE NAIADI**

Via Luigi Bonazzi 17 - 06123 - Phone n. 075 5733497

### **ALL'OLIVETO**

Via del Giaggiolo 92 - 06131 - Phone n. 075 44586