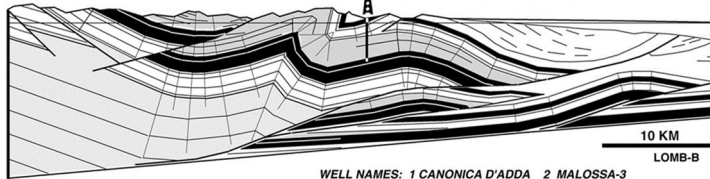
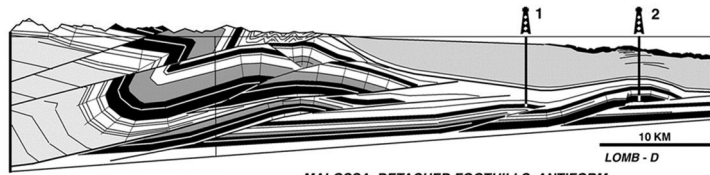


PO VALLEY BASIN WORLD RANK 84  
0.4 BILLION BBL OIL, 18.9 TCF GAS, 3.6 BBOE

AGIP-CHEVRON CASCINA RIVIERO



WELL NAMES: 1 CANONICA D'ADDA 2 MALOSSA-3



MALOSSA DETACHED FOOTHILLS ANTIFORM  
1.4 TCF WET GAS WITH <6 MMB LIQUIDS

## Scuola di Geologia Strutturale G. Pialli” 2017

“Thrust belt geometry and kinematics”

Steve Boyer\*

3 - 5 October 2017

Scuola Pialli is jointly organized by Dipartimento di Fisica e Geologia dell’Università di Perugia, with support of the GIGS (Gruppo Italiano di Geologia Strutturale) and aims at training PhD students and young researchers in Geology and Geophysics. The lectures will be held by Dr. **Steve Boyer\***.



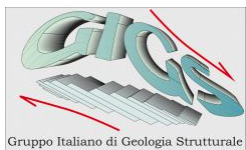
\***Steve Boyer** worked for several oil & minerals Companies (SOHIO PETROLEUM CO, STANDARD OIL PRODUCTION CO., ANSCHUTZ CORPORATION, AMOCO PRODUCTION COMPANY, ARCO OIL AND GAS COMPANY, ANACONDA COMPANY) and was a research associate at the University of Washington in Seattle. He has taught the “Compressional & Transpressional Tectonic Styles” course for PetroSkills and recently joined the TerraEx consulting group. Steve continues to conduct research in the geometry and kinematics of fold and thrust belt structures and is currently interested in new models of thrust propagation and duplex structures.

In the frame of the Scuola Pialli 2017, on Friday, 6<sup>th</sup> October, will be organised the “**Chuck Kluth**” workshop (no limit of participants) in memory of Chuck Kluth an unforgettable friend, geoscientist and thrust belt guru for many Italian geologists. The workshop will be about the “Thrust belt in Italy: from surface to deep geology” that interested Chuck so much in all his visits to Italy.

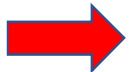
*The maximum number of participants is 20 and the fee is 50 euro.*

*Location: Dipartimento di Fisica e Geologia (Room F, Palazzo delle Scienze building) - 6 CFU.*

*For information, please contact Giorgio Minelli: [giorgio.minelli@unipg.it](mailto:giorgio.minelli@unipg.it) More information on: <https://www.facebook.com/search/top/?q=scuola%20pialli>*



Schedule of course and workshop



# Schedule of “Scuola di Geologia Strutturale G. Pialli” 2017 from October 3<sup>rd</sup> to 6<sup>th</sup> 2017

## **Thrust belt geometry and kinematics” by Steve Boyer**

### **Tuesday 3<sup>rd</sup> October from 9.00 to 13.00 and from 14.00 to 17.00**

Introduction & overview of the various compressive & transpressive styles, with focus on fold & thrust belts.

- Overview & plate tectonic settings for various structural styles.
- Thin-skinned fold & thrust belts: focus on 2D & 3D geometry of thrust sheets & associated folds.
- Fractures & deformational fabrics associated with thrusts & folds.
- Sequence of deformation in fold & thrust belts.

### **Wednesday 4<sup>th</sup> October from 9.00 to 13.00 and from 14.00 to 17.00**

Review of cross-section balancing techniques & problems of balancing. Thrust systems, 3D fold geometry, & variation in structural styles in space & time.

- Thrust systems, including new models for duplex structures.
- Strike-parallel variation in structural styles, including lateral ramps.
- Thrust-belt kinematics & mechanics.
- Some new ideas on thrust propagation.
- Cross-section balancing: overview & discussion of limitations of balancing.

### **Thursday 5<sup>th</sup> October from 9.00 to 13.00 and from 14.00 to 17.00**

Basement-involved tectonics, with focus on compressional basement-involved foreland uplifts, transpression & inversion. Summary & review of problems that deserve future study.

- Hydrocarbon systems in fold & thrust belts.
- Basement-involved foreland basin uplifts, with examples from US Rocky Mtns & the Andes.
- Wrench (strike-slip or transpressional) & inversion tectonics.
- Summary.
- Discussion: problems that deserve future study.

### **Friday 6<sup>th</sup> October from 9.00 to 13.00 and from 14.00 to 17.00**

## **Chuck Kluth Workshop “Thrust belt in Italy: from surface to deep geology”**

The main speakers will be : S.Boyer (introduction), E. Carminati (Dolomites), C. D'Ambrogi (Po plain), M. Barchi (Northern Apennines), G. Cavinato (Central Apennines), S. Mazzoli (Southern Apennines), A. Sulli (Sicily).