



## The Fifth International Congress for Radio Astronomy

The European Radio Astronomy Club

At the

University of Applied Science (FH Wieblingen) Heidelberg Germany

4<sup>th</sup> to the 6<sup>th</sup> of September, 2009

### Forth Congress Program

**Thursday 3<sup>rd</sup> of September "Early Arrivals"** will meet for a beer in the Heidelberger Altstadt (Old Town) Near the Old Heidelberger Bridge in the Steingasse 9 at the Wirtshaus **VETTERS** with its own Brewery inside, we have a table reserved from 19:00 Onward for ERAC

**Friday the 4<sup>th</sup> of September (Workshop Day)** Somewhere on campus ! Early arrivals please call peter !

10:00 CAD Circuit design using Sprint layout

11:30 SMD Soldering

12:30 **Dinner break**, at *Café Liberty on campus next to the Boarding house*

14:00 Understanding S Parameters "Using Agilent S Parameter Tester Live" Agilent

19:00 **End of the first day.** *Booze up on Campus "Liberty" Bonnhöfer Str 8*

**Saturday the 5<sup>th</sup> of September In the Science Tower Great Lecture hall at the Base Ludwig Gutman Str 6**

08:00 **Official Opening** Peter Wright, ERAC President, Prof P Shuch SETI League Executive Director, SARA 30 min

08:30 **Designing Low noise Amplifiers the PHEMT as MMIC** Peter Wright ERAC President 15 Min

09:00 Introduction to SETI Science and Technology Prof Dr Paul Shuch SETI League USA 30 min

09:30 The Radio Telescope Mannheim Upgrade 2007- 2009 Peter Wright ERAC President 30 Min

10:00 **Welcoming address** University of Applied Science Heidelberg Dr Winterberg SRH Heidelberg 30 min

10:15 Interferometry and Circular Polarisation Measurements in Radio Astronomy Dr David Fields SARA USA 30 min

10:45 **Short Tea and Coffee Break**

11:00 Cosmic Rays the Highest Energies in the Universe Dr Jörg Hörandel Radbound University Nijmegen Holland 60 Min

12:00 **Official Group Photo In front of the Science Tower** 10 Min followed by a "Brisk" walk to Dinner

12:15 **Dinner break**, at *Liberty on campus next to the Boarding house*

13:30 The Expanding Planets. Prof Dr-Ing Konstantin Meyl University of Furtwangen Black Forrest Germany 120 Min

15:30 **Short Tea and Coffee break 15 min**

15:45 LNA Cooling Peter Wright ERAC President 30 Min

16:15 The Multiwavelength Galactic centre SgrA Ms Yasmin Walter University of Frankfurt 40 min

17:00 The Landes Sternwarte Heidelberg Bernhard Keil Centre for astronomy University of Heidelberg (Film)

17:30 Project Argus Update Prof Dr Paul Shuch SETI League USA 30 min

18:00 The Optical Lunar Opposition Effect Prof Dr Elmar Schmidt University of Applied Science Heidelberg 30 min

18:30 Radio Eyes The Future of our Radio Astronomy, Global Joint Observing and VLBI Peter Wright ERAC President

20:00 End of the First Day we all go off to the **Official Congress Banquet. LIBERTY on Campus**

22:30 Possibility to Visit the Landes Sternwarte Heidelberg "Attach yourselves to Bernhard Keil" we need car drivers !

**Sunday the 6<sup>th</sup> of September In the Science Tower Great Lecture hall at the Base**

09:30 **Opening Coffee**

10:00 The Noise free far side of the Moon and the Future of Radio Astronomy Prof Claudio Maccone University of Turin Italy 30 min

10:30 Spacecraft Reception on 8.4GHz with a 1.8m Dish Dipl-Ing Wolfgang Arnold Germany 30min

11:00 International Spectrometer Network CALLISTO Dipl-Ing Christian Monstein Institute of Astronomy ETH Zurich Switzerland 60

12:00 **Dinner break**, at *Liberty on campus next to the Boarding house*

13:30 The Day the Earth stood out Prof Dr Paul Shuch SETI League USA 30 min

14:00 Beyond the FFT : Extraction of weak signals from Noise plus Data Compression by the **KLT** Prof Claudio Maccone 30 min

14:30 Monitoring Solar Activity by observing Satellites Martin Bertges 30 min

15:00 **Coffee break**

15:30 Non-local Signal Transfer between Atomic Nuclei (Timewave Research) Dipl.-Ing. Eckhard Kantz 45 min

18:15 A New way of planning SETI Searches by the STATISTICAL Drake Equation Prof Claudio Maccone 30 min

18:45 ???

18:45 ???

19:15 ??? All gaps in the program will be filled with interesting Lectures not yet official allot of you give me your lecture on the day

19:45 **Official End of the fifth International Congress for Radio Astronomy . or maybe later depending on late lectures**

The Survivors meet again for a final feed again at **Liberty**

**Emergency Telephone Info** - Peter: 01736366076/

Restaurant on Campus LIBERTY on the Bonnhöfer Strasse 8 behind the boarding house

This Event is open to Registered Members and Guests as well as Lecturers and Students of the University City of Heidelberg.

Contact info: [www.eracnet.org](http://www.eracnet.org) [erachq@aol.com](mailto:erachq@aol.com) Peter Wright Ziethen STR 97 68259 Mannheim 0621 794597

Emergency Hotels : High Class reasonable price Hollander Hof **06221 60500** [www.hollander-hof.de](http://www.hollander-hof.de)

ETAP Hotel Langlachweg 18, 68229 Mannheim – Friedrichsfeld 0621 48 47 620

Or find one in heidelberg via tourist information 06221 1422 ext 24 or 25 or 26 the Congress is in Heidelberg Wieblingen