

**Hearty Welcome to  
ICCF15-2009**

**from the  
Italian Physical Society (SIF)**

# The Italian Physical Society: SIF

The Società Italiana di Fisica (SIF) is a scientific association devoted to promoting and favouring the progress of physics in Italy, to increasing its understanding and application, and to supporting physicists.

SIF represents the Italian scientific community in the research, educational and professional fields, both private and public, relevant to all areas of physics and its applications.

SIF is also a leading communicator of physics to all audiences, from specialists through government to the general public.

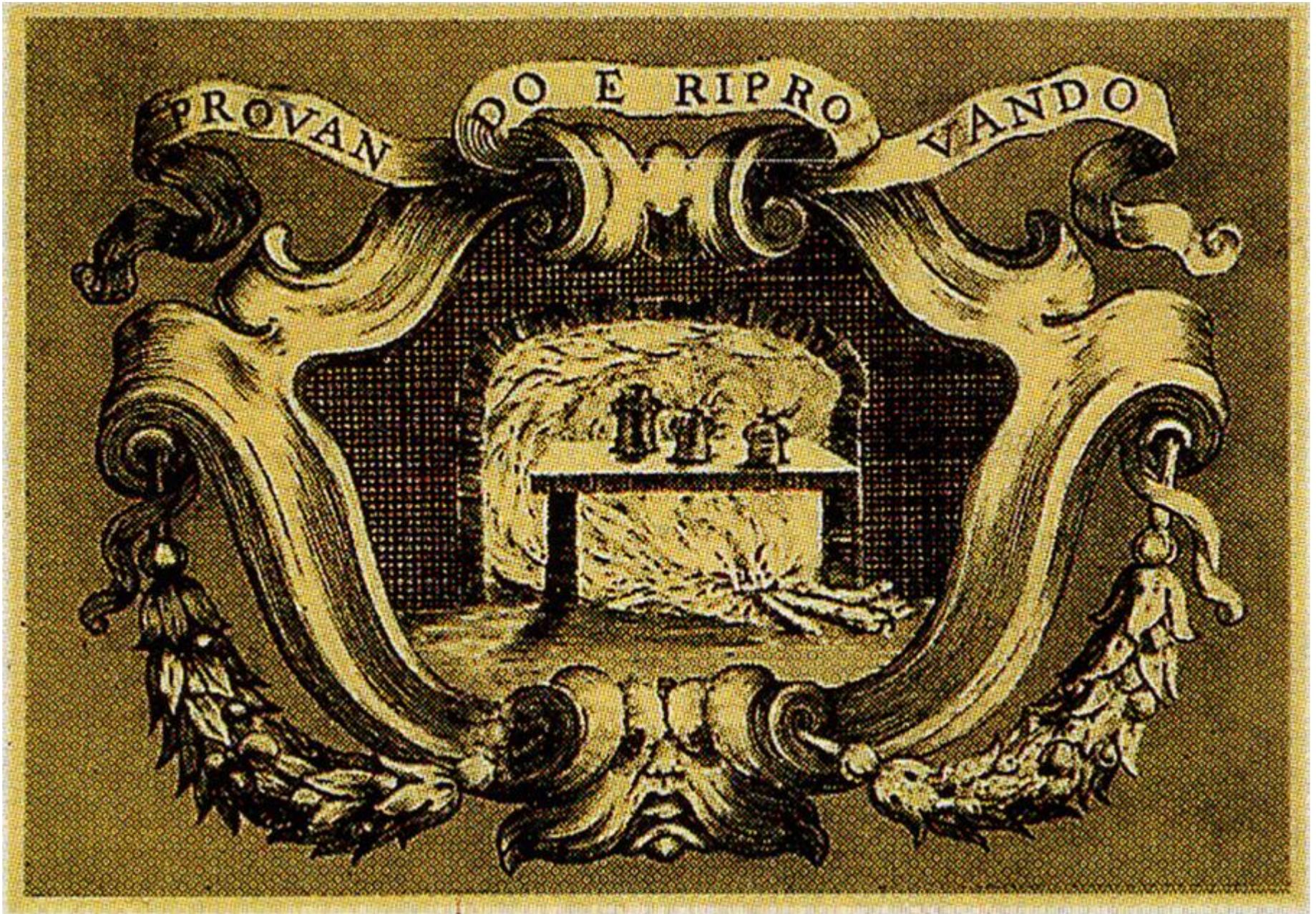
# Ideal ties

Ideal ties with the ancient "*Accademia del Cimento*", the association founded in 1657 by the Prince Leopoldo de Medici and the disciples of Galileo Galilei.

- The SIF logo reproduces the figure in the cover page of the journal "*Saggi di Naturali Esperienze fatte nell' Accademia del Cimento*".
- The SIF journal *Il Nuovo Cimento* takes the name from that of the Academy.



# The SIF logo



# The meaning of "Cimento"

*"Cimento, in its pregnant meaning, is at the same time the trial, the test, the effort, the risk, the peril, the experiment, the comparison, the thirst for knowledge, the extent to which the metal refines in the crucible.*

*The crucible then is the mind, and the two words (provando e riprovando) of the enterprise, mirroring each other, show the route to attain, by trying and trying again, the 'beauteous truth'. It is the essence of the Galilei's method."*

*G. Polvani (SIF President 1947-1961)*

# Other ideal ties

"Provando e riprovando" is found, with this meaning, in the first tercet of the third "canto" of the Paradise in the Divine Comedy poem by Dante Alighieri:

*Quel sol che pria d'amor mi scaldò 'l petto,  
di bella verità m'avea scoperto,  
provando e riprovando, il dolce aspetto.*

*That Sun, which erst with love my bosom warmed,  
of beauteous truth had unto me discovered,  
by proving and reproving, the sweet aspect.*  
...(translation by Henry Wadsworth Longfellow)

Here the beauteous truth, which Dante refers to, concerns the lunar spots and the influence of stars.

# Climbing the mountains

- Cold fusion, first announced on March 1989, raised hopes of a cheap and abundant source of energy. Enthusiasm turned soon to skepticism after replication failures of the original experiment.
- In Nov. 1989, the majority of a review panel organized by DOE found that the evidence for the discovery of a new nuclear process was not persuasive.
- In 2004, a second DOE review reached conclusions similar to the first, but with a smaller majority. Moreover, "the reviewers identified two areas (properties of deuterated metal and search for fusion events in thin deuterated foils) where additional research could address specific issues, and invited funding agencies to entertain individual, well-designed proposals".

# Could fusion back on the menu

The interest in the field has been growing in recent years, as shown by the presence of a session on cold fusion at the APS meeting in 2007.

- A number of basic research areas interesting in itself and helpful in resolving some of the controversies have been identified.
- A number of researchers keep researching and publishing in the field.

Since its first edition in 1990, the International Conferences on Condensed Matter Nuclear Sciences have provided a good forum for researchers to share their results and promote the understanding, development and application of the discipline.

I wish this conference is successful and will pave the way for further sound developments.

I also wish everyone a pleasant stay in Rome.