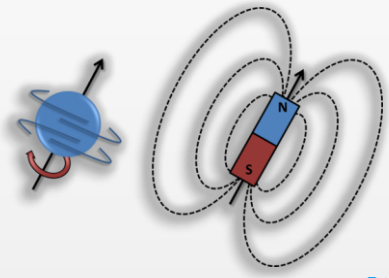
# *Application of NMR Spectroscopy to Study FeS Proteins*





@fesimmchemnet

**5-7 September 2023**
University of Florence
**Magnetic Resonance Center**
Polo Scientifico di Sesto Fiorentino
**Italy**

**Travel, Subsistence and Accommodation, All Costs Covered by:**

**COST Action – CA 21115** https://www.fesimmchemnet-cost.com/general-1

Application Deadline:
**July 15, 2023**

**Application and Enquiries should be sent to:**
Prof Mario Piccioli (piccioli@cerm.unifi.it)
Prof Simone Ciofi Baffoni (ciofi@cerm.unifi.it)

## Tutors:

Prof. Ricardo Louro (ITQB) – **NMR**
Prof. Wilfred R. Hagen (TU Delft) – **EPR**
Prof. Nick Le Brun (Norwich University) – **Native Mass Spectrometry**
Prof. Mario Piccioli (Univ. of Florence) – **Paramagnetic NMR**
Prof. Simone Ciofi Baffoni (Univ. of Florence) – **Interactomics by NMR**
Prof. Claudia Andreini (Univ. of Florence) – **Bioinformatics**
Prof. Isabella C Felli (Univ. of Florence) **– $^{13}$C NMR**
Prof. Moreno Lelli (Univ. of Florence) – **Solid state NMR**

## The school is Opened up to 10 Selected Participants

**Accommodation:**
Double shared room (Two trainee per room)
Starhotels Tuscany, hotel Novoli Florence, near Florence airport
Via di Novoli 59, Novoli - San Donato, 50127 Florence, Italy
*https://www.starhotels.com/en/our-hotels/tuscany-florence/*

# *PROGRAM*

**Tuesday 5th**

**9.00-9.10 Welcome – CERM Director**

**9.10-10.00**

Claudia Andreini (Univ. Florence) Bioinformatics of Metalloprotein

**10.00-11.00**

R. Louro (ITQB) Paramagnetic NMR, the toolkit

**11.00-11.30 Coffee Break**

**11.30-13.30 Practicals:**

Group 1. AV400: $^{1}$H NMR on very large SW, 1D NOE et alia (E. Ravera- Univ. Florence)

Group 2. Computer Room:

Bioinformatics tools for metalloprotein analysis (C. Andreini- Univ. Florence)

**13.30-14.30 Lunch**

**14.30-16.30 Practicals:**

Group 2. AV400: $^{1}$H NMR on very large SW, 1D NOE et alia (E. Ravera- Univ. Florence)

Group 1. Computer Room:

Bioinformatics tools for metalloprotein analysis (C. Andreini- Univ. Florence)

**16.30-17.00 Coffee Break**

**17.00-18.30**

Wilfred R. Hagen (TU Delft) EPR: Theory and applications

# *PROGRAM*

**Wednesday 6th**

**9.00-10.30**
N Le Brun (Norwich University) Native Mass Spectrometry: Theory and applications

**10.30-11.00 Coffee Break**

**11.00-13.00 Practicals:**
Group 2: Interactomics via NMR (S. Ciofi-Baffoni- Univ. Florence)
Group 1: AV500: $^{15}$N IR-HSQC-AP, $R_1$, $R_2$ NMR (M. Piccioli-J M da Silva- Univ. Florence)

**13.00-14.00 Lunch**

**14.00-16.00 Practicals:**
Group 1: Interactomics via NMR (S. Ciofi-Baffoni- Univ. Florence)
Group 2. AV500: $^{15}$N IR-HSQC-AP, $R_1$, $R_2$ NMR (M. Piccioli-J M da Silva - Univ. Florence)

**16.00-16.30 Coffee Break**

**16.30-18.30**
M. Lelli (Univ. Florence) – Solid State NMR, an introduction

# *PROGRAM*

**Thursday 7th**

**9.00-10.00**

I. Felli (Univ. Florence) – $^{13}$C NMR

**10.00-11.30 Practicals:**

Group 1. ssNMR: How to fill a rotor (M. Fragai-L. Cerofolini- Univ. Florence)

Group 2. AV700: $^{13}$C NMR (M. Schiavina- Univ. Florence)

**11.30-12.00 Coffee Break**

**12.00-13.30 Practicals:**

Group 2. ssNMR: How to fill a rotor (M. Fragai-L. Cerofolini- Univ. Florence)

Group 1. AV700: $^{13}$C NMR (M. Schiavina- Univ. Florence)

**13.30 Departure**