

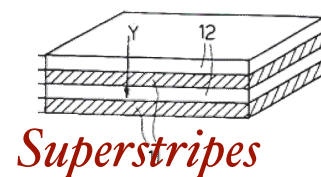
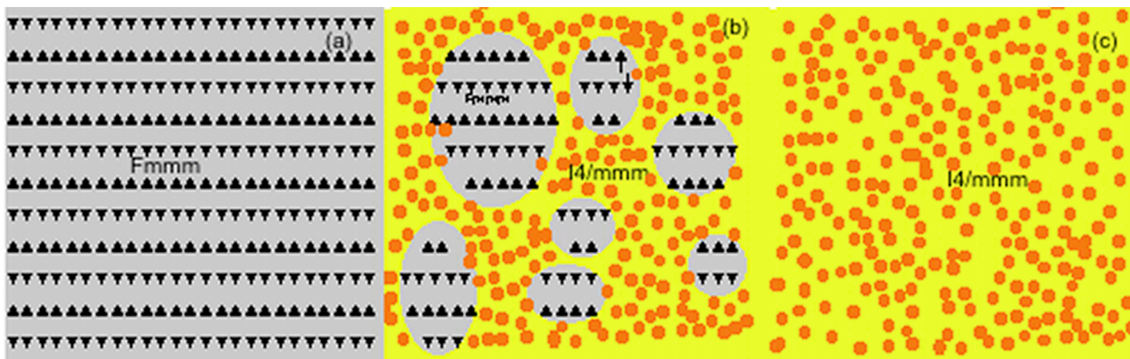
7th INTERNATIONAL CONFERENCE OF THE STRIPES SERIES

"FeAs High T_c Superconducting Multilayers and Related Phenomena"

Rome, December 9-13, 2008

SUPERSTRIPES 2008

PROGRAM



10 December 9:00-10:40 Aula Magna

9:00-10:40	Session 1	Chairmen: A. BIANCONI, F. KUSMARTSEV
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9:00-9:20

Opening Session

9:20-9:40 J.L. Luo

Superconductivity and spin-density-wave instability in Fe-based superconductors

9:40-10:00 D. Wu

Properties of $\text{Re}(\text{O}_{1-x}\text{F}_x)\text{TAs}$ (Re=rare earth, T=transition metal)

10:00-10:20 Christian Hess

The intrinsic electronic phase diagram of iron-pnictide superconductors

10:20-10:40 Taku Sato

Single crystal neutron inelastic scattering study on the ternary BaFe_2As_2 compound

10:40-11:10	Coffee Break
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11:10-12:50	Session 2	Chairmen: N.L. SAINI, J. MUSTRE DE LEON
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11:10-11:30 Anton Jesche

Cerium iron oxy pnictides: from a heavy fermion system to the parent compound for high- T_c superconductivity

11:30-11:50 Serena Margadonna

Structural and electronic properties of hole doped rare-earth iron oxyarsenides $\text{Nd}_{1-x}\text{Sr}_x\text{FeAsO}$

11:50-12:10 Chul-Ho Lee

Oxy pnictide Superconductors LnFeAsO_{1-y} (Ln=Lanthanide)

12-10-12:30 Hiroki Takahashi

High- pressure studies on superconductivity in $\text{LaFeAsO}_{1-x}\text{F}_x$, LaFePO , and SrFe_2As_2

12:30-12:50 Nao Takeshita

Pressure dependence of T_C in fluorine-free LnFeAsO_{1-y}

12:50-14:00	Lunch Break
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10 December 15:00-17:00 Aula Magna

15:00-17:00	Session 3	Chairmen: T. MIZOKAWA, H. TAKAHASHI
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- 15:00-15:20 Antony Carrington
Fermi surface of superconducting LaFePO determined from quantum oscillations
- 15:20-15:40 Vladimir Hinkov
Coexistence of superconductivity and magnetism in underdoped $Ba_{1-x}K_xFe_2As_2$ – a study by scattering and local-probe techniques
- 15:40-16:00 Fedor Kusmartsev
Two-component physics of oxides and FeAs High Tc Superconducting Multilayers and superconductor-insulator transition.
- 16:00-16:20 Jose Mustre de Leon
Near-edge X-ray Absorption in Iron Arsenide Rare Earth Oxides: Theory and Experiment
- 16:20-16:40 Philippe Borges
Magnetic order in the pseudo gap state of high-Tc cuprate
- 16:40-17:00 Davor Pavuna
Physics and NanoEngineering of Functional and High-Tc Oxides: Direct ARPES (=DARPES) on In-situ Grown Ultra-thin Films

17:00-17:30	Coffee Break
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17:30-19:30	Session 4	Chairmen: S. BORISENKO, S. SAVRASOV
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- 17:30-17:50 Thierry Klein
Hall probe magnetization and specific heat measurements in NdFeAs(O,F) single crystals
- 17:50-18:10 Takasada Shibauchi
Gap symmetry and anisotropy in the superconducting state of $PrFeAsO_{1-y}$ and $Ba_{1-x}K_xFe_2As_2$ single crystals
- 18:10-18:30 Fedor Balakirev
High field research in FeAs-based materials
- 18:30-18:50 Dimitri Basov
Charge dynamics in the normal state of the iron oxypnictide superconductor LaFePO
- 18:50-19:10 Yoshimitsu Kohama
Resistive Upper Critical Field in LaFeAs(O,F) AND $Sr(Fe,Co)_2As_2$
- 19:10-19:30 Steven Conradson
Phase Separation (in Cuprates) and an Exceptional Dynamic Polaron as a Consequence of Mixed Valence in UO_{2+x}

11 December 9:00-10:40 Aula Magna

9:00-10:40	Session 5	Chairman: E. CARLSON J. LUO
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- 9:00-9:20 Peter Samuely
Multigap superconductivity in pnictides
- 9:20-9:40 Ivan Maggio-Aprile
STM measurements of the superconducting gap and the dip-hump-like feature in single-crystalline $\text{SmFeAsO}_{0.86-x}\text{F}_x$
- 9:40-10:00 Dario Daghero
Evidence for two BCS-like gaps in $\text{SmFeAsO}_{0.8}\text{F}_{0.2}$ from point-contact Andreev-reflection spectroscopy
- 10:00-10:20 Renato Gonnelli
Point-contact Andreev-reflection spectroscopy in $\text{LaFeAsO}_{1-x}\text{F}_x$: Coexistence of two order parameters and a pseudogap
- 10:20-10:40 Rüdiger Klingeler
Magnetic, thermodynamic and structural properties of FeAs-based superconductors

10:40-11:10	Coffee Break
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11:10-12:50	Session 6	Chairmen: M. Grilli, I. MAGGIO-APRILE
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- 11:10-11:30 Antonio Bianconi
The Similarity of the 3d Phase Diagram of Iron Pnictides with Cuprates and Diborides Unveil the Fundamentals of the High T_c Superconductivity
- 11:30-11:50 Sergei Borisenko
 (π,π) -Electronic Order in Iron Arsenide Superconductors
- 11:50-12:10 Haiyun Liu
Electronic Structure and Superconducting Gap in $(\text{M}_{1-x}\text{K}_x)\text{Fe}_2\text{As}_2$ ($M = \text{Ba}$ and Sr) from Angle-Resolved Photoemission Spectroscopy
- 12-10-12:30 Volodymyr Zabolotny
Momentum dependence of the superconducting gap in $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$
- 12:30-12:50 Normann Mannella
Spectroscopic Evidence for Strong Itinerant Spin Fluctuations in the Normal State of $\text{CeFeAsO}_{0.89}\text{F}_{0.11}$ Iron-Oxypnictides Superconductors

12:50-14:00	Lunch Break
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11 December 15:00-17:00 Aula Magna

15:00-17:00	Session 7 (Parallel)	Chairmen: J. ASHKENAZI, M. CAPONE
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- 15:00-15:20 Sergei Savrasov
Electronic Structure and Exchange Interactions in Superconducting Pnictides
- 15:20-15:40 Lilia Boeri
Electron-phonon properties of Fe-As superconductors
- 15:40-16:00 Takashi Mizokawa
Excitonic instability and band Jahn-Teller effect in the FeAs layer
- 16:00-16:20 Jeroen Van den Brink
Heavy anion solvation of polarity fluctuations in Pnictides
- 16:20-16:40 Josè Lorenzana
Landau theory of competing orders in FeAs layers
- 16:40-17:00 Peter Sushko
Theoretical modeling of mechanism of structural and magnetic phase transitions in FeAs-based layered materials

11 December 15:00-17:00 Aula Conversi

15:00-17:30	Session 8 (parallel)	Chairmen: A. CARRINGTON, V. HINKOV
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- 15:00-15:20 Janus Karpinski
High pressure growth, structure and superconducting properties of $RFeAsO_{1-x}F_y$ ($R = Sm, Nd, Gd, La$) single crystals
- 15:20-15:40 Simon Kimber
Relationship Between Crystal Structure and Superconductivity in Structural Changes under High Pressure in the AFe_2As_2 Superconductors
- 15:40-16:00 Guillaume M. Lang
Electronic properties of iron pnictides as seen by NMR
- 16:00-16:20 Alberto Martinelli
Synthesis, crystal structure, transport, magnetic and thermal properties in Sm-based oxy-pnictide
- 16:20-16:30 Manoj Kumar
Pressure Effect on Magnetic and Structural Transition in $SrFe_2As_2$
- 16:30-16:40 Anke Köhler
WDX-Analysis of the New Superconductors $RO_{1-x}F_xFeAs$ ($R=La, Ce, Nd, Sm, Gd$) and its Consequences on the Electronic Phase Diagram
- 16:40-16:50 Danilo Zola
Granularity and vortex dynamics in $LaO_{0.92}F_{0.08}FeAs$ superconductors

17:00-17:30	Coffee Break Aula Magna
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11 December 17:30-19:30 Aula Magna

17:30-19:10	Session 9 (parallel)	Chairmen: C. CASTELLANI, J. LORENZANA
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- 17:30-17:50 Peter Thalmeier
Feedback effect in Rare Earth based FeAs and heavy fermion superconductors
- 17:50-18:10 Andrea Perali
BCS-BEC crossover in two-band superconductors: a mean field analysis
- 18:10-18:30 Lara Benfatto
Multiple gaps and superfluid density in a four-band model for oxypnictides
- 18:30-18:50 Nicola Poccia
The misfit strain critical point and Feshbach resonance in multigap superconductors and the 3d phase diagram of cuprates
- 18:50-19:10 Christian Platt

11 December 17:30-19:30 Conversi

17:30-19:10	Session 10 (parallel)	Chairmen: S. CONRADSON, S. KIMBER
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- 17:30-17:50 Andreas Koitzsch
Electronic structure of iron pnictides from photoemission spectroscopy
- 17:50-18:10 Federica Bondino
X-ray spectroscopy signature of electron itinerancy in $CeFeAsO_{0.89}F_{0.11}$ Iron-Oxypnictides
- 18:10-18:30 Walid Malaeb
Photoemission Study of FeAs High- T_c Superconductors
- 18:30-18:50 Thomas Kroll
On the electronic structure of electron doped rare-earth oxypnictides
- 18:50-19:10 Michela Fratini
Hysteretic continuous frustrated first order phase transition in 1111 FeAs-based superconductors

12 December 9:00-10:40 Aula Magna

9:00-10:40	Session 11	Chairman: R. GONNELLI, P. SAMUELY
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- 9:00-9:20 Adam Dubroka
Superconducting energy gap and c-axis plasma frequency of (Nd,Sm)FeAsO_{0.82}F_{0.18} superconductors from infrared ellipsometry
- 9:20-9:40 Tomaz Mertelj
Distinct pseudogap and superconducting state quasiparticle relaxation dynamics in near-optimally doped SmFeAsO_{0.8}F_{0.2} single crystals)
- 9:40-10:00 Alexander Boris
Quasiparticle renormalization effects in the normal-state optical properties of iron pnictides.
- 10:00-10:20 Gianni Profeta
The optical phonon spectrum of SmFeAsO
- 10:20-10:40 Robert Markiewicz
Momentum density, Fermi surface and directional Compton profile in the Iron-based superconductor LaOFeAs

10:40-11:10	Coffee Break
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11:10-12:50	Session 12	Chairmen: J. VAN DEN BRINK, J. KARPINSKI
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- 11:10-11:30 Tatsuo Goko
Muon Spin Relaxation Studies of Magnetic Order and Superconductivity in RE(O,F)FeAs and (A,K)Fe₂As₂
- 11:30-11:50 Yasutomo Uemura
Energy-scale Phenomenology and Spin-mediated Pairing for FeAs, CuO, heavy-fermion and other exotic superconductors
- 11:50-12:10 Toby Perring
High energy spin excitations in the parent phase of a pnictide superconductor
- 12-10-12:30 Samuele Sanna
 μ SR results on the magnetic and superconducting properties of SmFeAsO_{1-x}F_x
- 12:30-12:50 Jennifer Hoffmann
Scanning Tunneling Spectroscopy and Vortex Imaging in the Iron-Pnictide Superconductor BaFe_{1.8}Co_{0.2}As₂

12:50-14:00	Lunch Break
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12 December 15:00-17:00 Aula Magna

15:00-17:00	Session 13	Chairmen: R.S. MARKIEWICZ, Y. UEMURA
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- 15:00-15:20 Oleg Dolgov
Physical Properties of s_{\pm} Superconductors as a Model of Iron Pnictides
- 15:20-15:40 Erica Carlson
Magnetic Excitations of Undoped Iron Oxypnictides
- 15:40-16:00 Joseph Ashkenazi
A Unified Theory for the Cuprates, Iron-based and Similar Superconducting Systems
- 16:00-16:20 Alexander Yaresko
Magnetic properties of iron pnictides from spin-spiral calculations
- 16:20-16:40 Maxim Korshunov
Theory for magnetic excitations in Fe-pnictides
- 16:40-17:00 Sangeeta Sharma
Magnetic properties of $LaO_{1-x}F_xFeAs$

17:00-17:30	Coffee Break
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17:30-19:20	Session 14	Chairman: A. BIANCONI N. L. SAINI
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- 17:30-17:50 Ryotaro Arita
Unconventional superconductivity originating from disconnected Fermi surfaces in iron-pnictides
- 17:50-18:10 Massimo Capone
Orbital Selective Physics from crystal-field splitting and Hund's coupling in the Iron-based Superconductors
- 18:10-18:30 Giovanni Ummarino
The effect of negative interband coupling in the iron pnictides
- 18:30-18:50 Valery Kisel
The Key Role Of Dislocation-Like Mechanisms in Dynamics of Charged Particles in Superconductivity and Superfluidity
- 18:50-19:00 Alessandro Ricci
The Tetragonal-Orthorhombic Phase Transition and the Role of the Superlattice Misfit Strain
- 19:00-19:20 Alessandra Lanzara

Poster Session 10th, 11th, 12th December

Aula Magna 14:00- 15:00

- 1P Denis Arcon,
Influence of the Nd 4f States on the Magnetic Behavior and the Electric Field Gradient of the Oxypnictides superconductors NdFeAsO_{1-x}F_x
- 2P Andrew W. Beckwith,
Can CDW Structural Phase Transitions be modeled as quantum phase transitions, as seen in current vs. applied electric field values seen in the laboratory?
- 3P Zbigniew Bukowski,
Superconductivity at 22 K in Rb-Substituted BaFe₂As₂ Single Crystals
- 4P Roberta Citro,
Critical temperature and isotope exponent in a two band-model for superconducting Fe-pnictides
- 5P Daniele di Gioacchino,
Irreversibility line and flux dynamic in NdO_{1-x}F_xFeAs bulk sample
- 6P Jack Gillett,
High-Field and High-Pressure studies on the 122 Iron Arsenates
- 7P Kiichi Miyazawa ,
Superconducting transition temperature exceeding 50 K in oxypnictide superconductors LnFeAsO_{1-y} (Ln= Nd, Sm, Gd, Tb and Dy)
- 8P Philip Moll,
Magneto-transport near T_c in SmFeAs(O_{0.7}F_{0.25}) single crystals of FIB-defined geometry
- 9P Olaksandr Tkachenko,
Synthesis, crystal growth and epitaxial layers growth of FeSe_{0.88} superconductor and other poison materials by use of high gas pressure trap system
- 10P Ilaria Pallecchi,
Thermodynamic estimation of the upper critical field slope of doped SmFeAsO from fluctuation conductivity in the critical regime
- 11P Nicola Poccia
Global 3D phase diagram of cuprates superconductor
- 12P Zuzana Pribulova,
Superconducting properties of Ba(Fe_{0.93}Co_{0.07})₂As₂
- 13P Alessandro Serafin,
Magnetic penetration depth of single crystal of SmFeAsOF and LaFePO
- 14P Matteo Tropeano,
Thermal and Transport properties of SmFeAsO_{1-x}F_x: from SDW to superconducting ordering
- 15P Lev Vinnikov,
Direct observation of Abrikosov's vortices in Ba(Fe_{0.9}Co_{0.1})₂As₂ single crystals
- 16P Volodymyr Zabolotny,
Evidence for Fermi surface reconstruction in the static stripe phase of La_{1.8}_xEu_{0.2}Sr_xCuO₄, x = 1/8
- 17P Nikolai Zhigadlo,
High Pressure Synthesis and Characterization of FeAs-Based Superconductors