

CURRICULUM VITAE

Claudia Fasolato

General information

First name: Claudia
Last name: Fasolato
Date of birth: 08.03.1988
Place of birth: Vicenza

Vicenza, Italy.

Current position:

PhD student in Physics (Scuola di Dottorato in Fisica, XXIX ciclo),
Physics Department, Sapienza University, Rome.
Supervisor: prof. dr. P. Postorino.

Education

October 2013

Master thesis at HPS Group, Physics Department, Sapienza University, Rome, Italy.
Title: "Spettroscopia Raman *Surface Enhanced* da aggregati metallici funzionalizzati"
Advisors: Prof P. Postorino, Dr. F. Domenici.

Sept. 2010 – Oct. 2013

Master degree in Condensed Matter Physics
Sapienza University, Rome.
Graduation Mark: 110/110.

Sept. 2007 – Nov. 2010

Degree in Physics
Sapienza University, Rome.
Thesis: "Spettroscopia di fotoemissione ed una sua applicazione"
Advisor: Prof. C. Mariani
Graduation Mark: 110/110 cum laude.

Sept. 2002 – June 2007

High school diploma
Liceo Scientifico Statale G. B. Quadri, Vicenza
Mark: 100/100 cum laude.

Languages

Italian: mother tongue

English: fluent

German: basic

Exams (Master degree course)

Meccanica Quantistica Relativistica (30/30)

Meccanica Statistica e Fenomeni Critici (28/30)

Materia Condensata (28/20)

Meccanica Razionale (30/30)

Laboratorio di Fisica (30/30)

Fisica dei Solidi (30/30 cum laude)

Ottica Non Lineare e Quantistica (30/30)

Chimica dei Materiali Polimerici (30/30)

Fisica delle Superfici e delle Nanostrutture (30/30)

Metodi Spettroscopici della Materia Condensata (30/30)

Funded projects

Progetto di Avvio alla Ricerca Anno 2014, Università Sapienza
(funding euro 2000)

“Ordered disorder: local and non-local plasmonic coupling in self-assembled nanostructure arrays for high performance surface-enhanced spectroscopy”

Publications

C. Fasolato, F. Domenici, S. Sennato, F. Luongo, F. Costantini, F. Mura, F. Bordi, and P. Postorino

“Dimensional Scale Effects on Surface Enhanced Raman Scattering Efficiency of Self-assembled Silver Nanoparticle Clusters”

Applied Physics Letters **105**, 073105 (2014)

Conferences

F. Domenici, F. Luongo, M. Frogley, G. Cinque, A. Bedini, C. Giliberti, R. Palomba, C. Fasolato, S. Scarpa, S. Morrone, and F. Bordi

“SR Micro-FTIR Evidence of Ultrasonic Nanoparticle Delivery in Single Cells”

Abstract and poster in **ANM 2014, 5th International Conference on Advanced Nanomaterials**
(Aveiro, Portugal, 2-4.07.2014)

L. De Angelis, C. Fasolato, E. Mazzi, F. Brasili, S. Sennato, F. Mura, F. Bordi and P. Postorino

“Multilayer effects in nanoparticle aggregates: exploiting collective plasmonics for high performance SERS”

Abstract and poster in **Plasmonica 2014** (Rome, 30.06-2.07.2014)

C. Fasolato, F. Domenici, L. De Angelis, E. Mazzi, F. Brasili, F. Mura, F. Bordi, and P. Postorino

“Molecular driven self-assembly towards a reproducible SERS substrate”

Abstract in **SINFO II** (Trieste, 25-27.07.2014)

C. Fasolato, F. Domenici, L. De Angelis, E. Mazzi, S. Sennato, F. Mura, F. Costantini, F. Bordi, and P. Postorino

“Dimensional scale effects on Surface Enhanced Raman Scattering efficiency of self-assembled silver nanoparticle clusters”

Abstract and poster in **Nanoplasm 2014** (Cetraro (CS), 16-20.06.2014)

C. Fasolato, F. Domenici, F. Luongo, S. Sennato, F. Bordi, P. Postorino, F. Costantini and F. Mura

“High performance Surface Enhanced Raman Scattering active nanoparticle clusters: a combined high spatial resolution Raman microspectroscopy and AFM approach”

Abstract and poster in **International Soft Matter Conference 2013** (Rome, 15-19.09.2013)

F. Domenici, F. Luongo, C. Fasolato, Simona Sennato, A. Congiu Castellano, P. Postorino, F. Bordi, A. Bedini, C. Giliberti, R. Palomba, G. Cinque and M. Frogley

“Ultrasonic nanoparticle delivery in vitro: an advanced SR Micro-FTIR-based approach to gain molecular evidence in single cells”

Abstract and poster in **International Soft Matter Conference 2013** (Rome, 15-19.09.2013)

C. Fasolato, F. Domenici, S. Sennato, F. Luongo, F. Costantini, F. Mura, F. Bordi, and P. Postorino

“Surface Enhanced Raman Scattering from self-assembled silver nanoparticle microclusters: a combined Raman spectroscopy and AFM approach”

Abstract and poster in **Plasmonica 2013** (Milan, 1-3.07.2013)
Awarded best poster.

Other experiences:

Frequent participation, as scientific tutor, to public events such as “Notte della Ricerca” (with Frascati Scienza association) and “Festa della Primavera” (at Orto Botanico, Rome).

Experienced in physics demonstrations and laboratory activities particularly dedicated to children (5-15 y.o.).