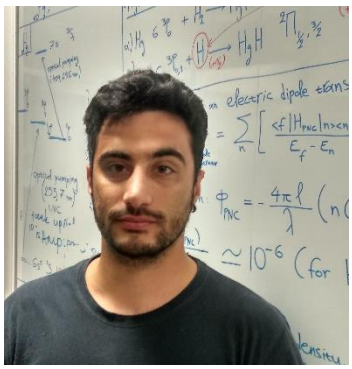
CURRICULUM VITAE



Michail Xygkis

Born in Athens, Greece.

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Education:

2020-present	PhD student at University of Crete, Physics Department & FO.R.T.H.-I.E.S.L., Polarization Spectroscopy
2018-2020	Master in “Photonics and Nanoelectronics” at the University of Crete (Greece), Department of Physics GPA: 8.54/10 Master Thesis title:” Nanoresolved magnetometry with spin polarized hydrogen atoms”
2013-2018	Diploma in Physics at the University of Crete (Greece), Department of Physics, GPA: 7.72 Bachelor Thesis title:” A study on Vanadium (IV) dioxide polymer assisted and thermochromic behavior”
2010-2013	High School, 2nd Lyceum of Kaisariani (Athens), GPA: 18.3/20

Training courses and workshops:

- Physics Colloquium: Test fundamental atomic physics using precision laser spectroscopy (Prof. Yi-Wei Liu, 10 October 2019)
- Physics Colloquium: Carbon nanotubes, graphene and other 2D materials for electronics and optoelectronics: past present and possibly future?" (Dr. George Deligeorgis 21 February 2019)
- 7th International Symposium of Transparent Conductive Materials 4th EMRS & MRS-J Bilateral Symposium on Advanced Bandgap Semiconductors 14-19 October 2018

- 6th ELBYSIER Intensive Course, “Graphene Technologies and nano-electronics”, Chania, Crete, Greece, 1 - 8 July 2018
- Atomic Molecular and Optical Physics Seminar

1. Extending the life of quantum information with smart control schemes (Prof. Ed Barnes - Virginia Tech)
2. Quantum thermodynamics in opto-mechanical systems
   (Prof. Ozgür Müstecaplioğlu - Koc University)
3. Room temperature quantum memories from nanoseconds to hours
   Prof. Ofer Firstenberg - Weizmann Institute of Science
4. Matter wave interferometry: Particle – wave duality in action (Dr. Wolf von Klitzing – FORTH-IESL)
5. Simulating few-and many-body Physics with Rydberg atoms (Dr. David Petrosyan– FORTH-IESL)
6. Spin-polarized nuclear fusion: possible via optical excitation of molecules? (Prof. Peter Rakitzis UOC & FORTH-IESL)

Publications

1. AK. Spiliotis, **M. Xygkis**, K. Tazes, GE. Katsoprinakis, G. Vasilakis, T. Peter Rakitzis1, 2 “A Nanosecond-Resolved Atomic Hydrogen Magnetometer”, (Under preparation)

2. A.K. Spiliotis, **M. Xygkis**, M. Koutrakis, K. Tazes, G.K. Boulogiannis, C.S. Kannis, G.E. Katsoprinakis, D. Sofikitis, T.P. Rakitzis “Ultrahigh-Density Spin-Polarized Hydrogen Isotopes from the Photodissociation of Hydrogen Halides: New Applications for Laser-Ion Acceleration, Magnetometry, and Polarized Nuclear Fusion”, Light: Science & Applications (Submitted)

3. AK Spiliotis, **M. Xygkis**, E Klironomou, E Kardamaki, GK Boulogiannis, GE Katsoprinakis, D Sofikitis, TP Rakitzis, “Optical activity of lysozyme in solution at 532 nm via signal-reversing cavity ring-down polarimetry”, Chemical Physics Letters, 747, 137345, (2020)

4. AK Spiliotis, **M. Xygkis**, E Klironomou, E Kardamaki, GK Boulogiannis, GE Katsoprinakis, D Sofikitis, TP Rakitzis. “Gas-phase optical activity measurements using a compact cavity ringdown polarimeter”, Laser Physics, 30, 075602, (2020)

5. **M. Xygkis**, E. Gagaoudakis, L. Zouridi, O Markaki, E. Aperathitis, K. Chrissopoulou, G. Kiriakidis, V. Binas” Thermochromic behavior of VO2/polymer nanocomposites for energy saving coatings”, Coatings ,9 ,163, (2019)

Posters

1. **M. Xygkis**, E. Gagaoudakis, L. Zouridi, O Markaki, E. Aperathitis, K. Chrissopoulou, G. Kiriakidis, V. Binas" Dispersion Stability of VO2 nanoparticles and thermochromic properties of thin films",7th International Symposium of Transparent Conductive Materials, 14-19 October 2018

Scientific skills

Cavity Ringdown Spectroscopy, Production and Detection of Spin Polarized atoms, Absorption Spectroscopy, Nano-resolved Magnetometry, SEM (Scanning electron microscopy), AFM (Atomic force microscopy), UV- Vis – NIR spectroscopy, XRD (X-ray Diffraction).

Computer skills

Microsoft Office, Autodesk Inventor and CAD, Adobe Photoshop & Illustrator, Python, Fortran 95, Origin, Linux, MATLAB, Mathematica & Origin

Languages

Greek (native language)
English ("B2 level", Cambridge & Michigan)
German ("B1 level", Goethe-Zertifikat)
