Postdoctoral Opportunity in Optically-pumped Atomic Magnetometers

Position: Postdoctoral Fellow

Location: George Mason University, Fairfax, VA

Salary: $75,000 per year

Duration: Up to 3 years

Opportunity

A postdoctoral researcher position is immediately available in the Magnetic Resonance Laboratory at George Mason University. The laboratory studies quantum sensors used to detect magnetic fields in the radio-frequency range. The research involves understanding and exploiting spin dynamics, to push atomic magnetometers to their quantum noise limits, while at the same time exploring new ways to use, as well as compactify, these ultra-sensitive sensors. The successful candidate will design and implement atomic-magnetometer arrays to measure magnetic field tensors in an open environment. Spatial mapping of fields allows for localization of signal sources. Sensor development will be done in collaboration with Twinleaf. Individuals from minoritized and/or underrepresented populations are particularly encouraged to apply.

Desired Qualifications

- PhD in physics, atomic physics, or related field
- Expertise in radio-frequency and atomic spectroscopy
- Experience designing and constructing electronic probes
- Experience conducting optical experiments
- Strong oral and written communication skills
- Familiarity with LabView and Python or MATLAB programming language

Equity Statement

George Mason University is an equal opportunity/affirmative action employer, committed to promoting inclusion and equity in its community. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability or veteran status, or any characteristic protected by law.

Application Process

Please send a cover letter and a Curriculum Vitae in PDF format to ksauer1@gmu.edu along with the name and contact information of three references.