PhD Position – Optimizing Performance Under Uncertainty: Biomechanics of Unanticipated Actions in Real and Virtual Environments

Application deadline: 15th Jan. 2026

Starting date: between 01 Feb. 2026 and 01 March 2026

Contract: 0.4 full-time equivalent PhD position (at least 4 years, subject to annual evaluation)

About the Hosting Environment

The successful candidate will join the Motion Analysis Laboratory (LAM). LAM is a multidisciplinary research unit jointly affiliated with the Faculties of Applied Sciences and Medicine of the University of Liège (www.lam-motionlab.uliege.be). The team brings together engineers, physiotherapists, movement scientists, and experts from various scientific backgrounds. LAM maintains long-standing clinical collaborations, in particular with the Physical Medicine and Rehabilitation Department of CHU de Liège, and plays a key role in the biomechanical support of elite athletes.

LAM is recognized for its expertise in 3D motion analysis, biomechanical modeling, athlete monitoring, injury-prevention strategies, and performance optimization. The laboratory is an official partner of the Fédération Wallonie-Bruxelles through its role as the biomechanical and prevention expertise center of the Centre d'Aide à la Performance Sportive (CAPS - https://www.capsport.be/). It also collaborates with the FIFA Medical Centre of Excellence in Liège and the ReFORM network, supported by the International Olympic Committee. Each year, LAM evaluates dozens of elite athletes in order to improve performance, enhance training strategies, and reduce injury risk. The unit produces high-quality international publications and actively supervises multiple PhD and master's theses.

Main Responsibilities

- Conduct high-quality research leading to a doctoral thesis.
- Contribute to scientific publications and presentations at international conferences.
- Participate in the supervision of Master students when relevant.
- Provide community service duties at CAPS, such as assisting in athlete testing and reporting.
- Engage in the academic life of the research unit.

Required Qualifications

- Master's degree in Physiotherapy, Movement Sciences, Biomechanics, Engineering, or a related field.
- Proficiency in English (spoken and written).
- Strong interest in high-level sport and performance sciences.
- Demonstrated capacity for initiative, autonomy, and problem-solving.
- Strong teamwork skills and ability to collaborate in a multidisciplinary environment.
- Capacity to innovate and interest in technological development, including VR-based tools.
- Excellent communication skills, both written and oral.

We Offer

- A stimulating scientific environment within a multidisciplinary research unit.
- Access to state-of-the-art motion analysis equipment.
- Strong collaborations with clinicians, engineers, sports scientists, and elite sports organizations.
- A 0.4 equivalent full-time PhD position.

How to Apply

- A motivation letter explaining your interest in the position and relevant experience.
- A detailed CV.
- Academic transcripts of your Master's program.
- Contact information for at least one reference (professor or supervisor).

Applications should be sent to: Prof. Jean-Louis Croisier (jlcroisier@uliege.be), Prof. Cédric Schwartz (cedric.schwartz@uliege.be) and Prof. François Delvaux (fdelvaux@uliege.be)