

**Mardi 3 février 2026**

11H00-12H00 – SALLE CHASSERAL, RTE DE LA CORNICHE 21 – 1010 LAUSANNE

## «Multi-Scale Estimation of Cancer Sojourn Times: Statistical and Molecular Approaches»

### **SPEAKER**

Professor Marc Ryser trained in physics at the École Polytechnique Fédérale de Lausanne (EPFL) and earned a PhD in mathematics from McGill University. He, then joined Duke University as a postdoctoral fellow, first in the Department of Mathematics, and then in the Department of Surgery. He was appointed Assistant Professor at Duke in 2018 and Associate Professor in 2024, holding a joint position in Population Health Sciences and Mathematics. In August 2025, he joined the University of Geneva as Professor of Cancer Epidemiology and Director of the Geneva Cancer Registry, where he continues his research in cancer early detection and epidemiology.

### **ABSTRACT**

The duration of the preclinical detectable phase, or sojourn time, is a key determinant of the benefits and harms of cancer early detection. Yet because it is not directly observable, its estimation is challenging. In this talk, we discuss two complementary approaches to sojourn time estimation. In the first part, we present a Bayesian sampler that enables the statistical characterization of sojourn times in a screening cohort based on individual-level screening and cancer diagnosis histories. In the second part, we present a DNA methylation-based molecular clock that estimates sojourn times at the patient level.

Recommandé par la Société Suisse des Spécialistes en prévention et santé publique (SPHD) pour la reconnaissance de la formation continue.  
Participer à la réunion WebEx.

[Lien WebEx](#)