## **FOREWORD**

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Pino Tenti, my colleague, teacher and mentor, passed away after a brief battle with cancer on June 10, 2016. Pino had a remarkable career at the University of Waterloo, anchoring the Mathematical Medicine research group, mentoring a generation of graduate students, and teaching very popular courses in the Mathematics, Science and Engineering Faculties. I was remarkably lucky to have Pino teach me mechanics at an early stage of my career. The course certainly taught me mechanics, but when I approached Pino for something more to read he did not offer me more mechanics. Instead he offered a set of essays by Henri Poincaré. For a young mind still somewhat confused about which direction to pursue, it was the perfect tonic to what was at that point, an academic experience filled with large, impersonal classes which often lacked both substance and personality.

Pino taught me classes at the undergraduate and graduate level, wrote dozens of letters of recommendation for my peer group (including a memorable one for my best friend under the condition "as long as you stick to pure mathematics"), supervised my Master's thesis, and advised me on a broad range of academic decisions. When I returned to Waterloo as an assistant professor, it was comforting to find Pino's door open, and an older gentleman within, who was as ready as always for a good argument. It is thus no exaggeration for me to say Pino was one of three people who form the *sine qua non* of my academic career.

The collection of papers in this special issue barely scratches the surface of Pino's interests, but it does give some idea as to the scope of Pino's generosity with his time. Whether it was new colleagues, long time collaborators, or students, no topic in the broadest definition of physics was off limits, and I believe this is reflected in the topics in this volume. I hope a further generation of students benefits from these papers in driving their own research, and I know that would have given Pino great satisfaction.

Thank you also to Xinzhi Liu, another of my undergraduate mentors, for facilitating this special issue.