

# THE SCIENCE OF SOCIAL INTERACTIONS



**A TALK BY**

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**ABSTRACT** | Among all the intangible aspects that impact our well-being, social relationships are paramount. They determine where we work, who we marry, and what we do; they are the main source of our happiness. In the era of social media, a sheer volume of social interaction data is generated every day. Yet, the analytical tools at our disposal to explain the meaning of those interactions and their impact on our well-being are surprisingly limited. In our work, we adopt a theory-driven approach to build analytics tools that bring our algorithmic understanding of social interactions closer to human-level knowledge. By operationalizing social science theories, we identified the ten fundamental dimensions that form social relationships. By capturing those dimensions from conversational data, we enable tools to predict and explain a number of real-world individual and societal outcomes (e.g., resolution of conflict). We believe that the methods we propose are not only useful to better understand human societies but also to unlock new technologies of human sensing and emotional AI.

**BIO** | Luca Maria Aiello is a Senior Research Scientist in the Social Dynamics team at Nokia Bell Labs Cambridge, UK and Research Fellow of the ISI Foundation in Torino, Italy. Formerly, he has been a Research Scientist at Yahoo Labs for almost 5 years. He conducts interdisciplinary research in network science, computational social science, and urban informatics. His work has been covered by hundreds of news articles published by news outlets worldwide including Wired, WSJ, and BBC. He is a founding member of GoodCityLife.org, a global network of scientist with the goal of giving a good life to city dwellers.