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Dynamical networks of person to person interactions from RFID sensor networks LORENZO ISELLA, CIRO CATTUTO, ISI Foundation Viale S. Severo 65 - 10133 Torino - Italy, ALAIN BARRAT¹, Centre de Physique Théorique, Marseille, France, ISI-CPT COLLABORATION² — We present a scalable experimental framework for gathering real-time data on face-to-face social interactions with tunable spatial and temporal resolution. We use active Radio Frequency Identification (RFID) devices that assess mutual proximity in a distributed fashion by exchanging low-power radio packets. We show results on the analysis of the dynamical networks of person-to-person interaction obtained in four high- resolution experiments carried out at different orders of magnitude in community size.

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