Marcello Cirillo received his MSc degree in Computer Science Engineering from Politecnico of Milano, Italy, in 2005. Since 2007, he has been a graduate student at the Center for Applied Autonomous Sensor Systems (AASS) in Örebro, Sweden. His research interests include robot task planning with people present and human activity recognition.

Broadly speaking, task planning is the discipline that provides means-end reasoning techniques to an autonomous agent deliberating on action execution to achieve a set of goals. As robots are finding their way to environments where people are present, new techniques are required to take the human users into account.

Human activity recognition is a research area that addresses the broad problem of deducing information about the past or current activities of one or more human subjects.

Both robot task planning and activity recognition are essential for the co-habitation of people and robots, as the latter provides contextual information about the state of the users that is considered during robot task planning. This thesis presents novel approaches to both problems.

Lotta Sartz is working as an environmental chemist within the EU-financed project Bergskraft Bergslagen. She has been a PhD-student at the Man-Technology-Environment Research Centre (MTM), School of Science and Technology, Örebro University, since 2006. The focus of her research is remediation of historic mine sites with alkaline industrial by-products as amendments.

Doctoral Dissertation
Planning in Inhabited Environments
Human-Aware Task Planning and Activity Recognition

Marcello Cirillo
Computer Science