Formal pragmatics for the study of argumentation in deliberative debates

The study of argumentation has a long standing tradition. It lies at the interface of various disciplines such as politics, sociology, philosophy and linguistics. The project visual analytics and linguistics for the interpretation of deliberative argumentation (VALIDA) is concerned with a linguistically motivated analysis of argumentation, specifically in a deliberative context. The main focus lies on exploring computational models for identifying argumentation in debates, i.e. dialogue data, and on providing an intuitive visual representation of the main findings that the given models support. This latter part is developed in collaboration with the Department of Computer and Information Science. In the present talk, I will focus on the linguistic aspects of argumentation, in particular, I am interested in the question of how the common ground, a core component of formal pragmatics, which keeps track of the publically shared beliefs during a conversation, develops during the course of a debate.

For this purpose, I present an annotation scheme for argumentation (inference anchoring theory, or short: IAT) and results from an ongoing effort to explore the effects of different kinds of arguments on the common ground. Furthermore, I present work on a computational system that implements the formal aspects of deriving the common ground from a theory of argumentation that lie at the center of this talk.