Star-formation rates and rates per unit area vary from cloud to cloud; taken together, the five clouds are producing about 260 M☉ of stars per Myr. Based on a very simple model and this sample of sources, half the mass of a star would be accreted during only 7% of the Class I lifetime, as represented by the eight most luminous objects. The likelihood of massive star formation in a cloud is determined, and it is found that the median cloud mass that contains at least one O star is ~10^4 M☉. The average star formation efficiency over the lifetime of an association is about 5%, but varies by more than 2 orders of magnitude from cloud to cloud and is predicted to increase. The Theory and Observations of Stars group investigates the physical processes that take place in stars and how these change as a function of stellar evolution. The group focuses on low-mass main-sequence stars, subgiants, and red giants and uses a method known as asteroseismology for their research. [14]. Following research groups[edit]. Following research groups have been conducting research at HITS. As of April 1, 2017, Pfrommer is leading the research group Cosmology and Large-scale Structure at the Leibniz Institute for Astrophysics Potsdam (AIP) and professor for astrophysics at the University of Potsdam. His group stayed at HITS until summer 2017 and then also moved to Potsdam.[16]. Theoretical Astrophysics (TAP). September 10th-14th, 2007 Convention Center, Heidelberg, Germany. Please send the credit card payment form by fax to: +49 6221 528 342. For further information: e-mail: beuther@mpia.de Phone: +49 6221 528 447. Last Name of participant: First Name of participant: Other Initials: I hereby authorise that the above credit card is used to pay the total amount specified above, in order to pay my registration and other charges for the Massive Star Formation: Observations confront Theory conference 2007 in Heidelberg. Signature: Date: These workshop proceedings aim to provide a broad overview of recent developments in the study of hot stars, both from the observational and the theoretical point of view. Included are first results from the Hubble Space Telescope and ROSAT, the effects of non-radial pulsations, mass loss, magnetic fields, and diffusion, as well as modern theoretical methods to treat radiative transfer and compute model atmospheres. Many new results are described, including the discovery of a B star in the halo of M31. Together the reviews provide a general overview of hot-star spectroscopy suitable for prepar