## Invited talk

## Star Formation Processes and Energy Sources in Interstellar Gas

## **Bruce Elmegreen**

IBM Research Division, T. J. Watson Research Center, USA

Stars and interstellar matter in normal disk galaxies are marginally unstable to produce spiral arms and largescale turbulent energy. If the spiral-shocked gas is dense enough, it can collapse further into giant cloud complexes and eventually stars. Young stellar feedback then destroys the clouds and produces more turbulence. The fraction of the observed turbulent energy that comes from large-scale cascades versus small-scale feedback is currently unknown. The importance of stellar feedback as a regulator for star formation is also unknown. This talk will review observations of these processes and comment on the various sources of turbulent energy.