M.E. Prokhorov (Sternberg Astronomical Institute, Russia) "Evolution of stellar populations and compact objects"

In this lecture I give a review of methods and astrophysical results based on synthesis of single and binary stars population. The following problems are considered:

- Single stars evolution. Photometrical and spectral population synthesis.
- Binary evolution. Nondegenerate stars.
- Evolution of compact objects in binaries.
- Classical population synthesis results.
- Problems of population calculation.
- Triple and multiple systems.
- Evolution in dense stellar clusters.
- Unique objects.