VI SERBIAN-BULGARIAN ASTRONOMICAL CONFERENCE,
7-11 MAY 2008, BELGRADE, SERBIA,
PROGRAM AND ABSTRACTS, EDS. MILAN S. DIMITRIJEVIĆ, MILCHO TSVETKOV,
LUKA Č. POPOVIĆ, VALERI GOLEV, ASTRONOMICAL OBSERVATORY, BELGRADE, 2008

Short talk

NEW TREND IN ASTROMETRY: INTELLIGENT SYSTEMS INSTEAD AUTOMATIC MEASURING MACHINES

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Modern astrometry researches based on collection of plates have been slowed down by some troubles in measuring process. Scanners and automatic measuring machines are capable to make fast data processing but still have problems of measuring of photographic plate without human's control in real time. To overcome it the intelligent decision-taking system should be constructed.
Vital differences of the proposed system are:

1. Ability for decision agenda to work in non-stop mode under list of troubles or combination of it;
2. Self-tuning system to measuring plates and objects;
3. Real time diagnostic and storing of main parameters of measuring system;
4. Verification output for experimental data in real time to control measuring process;
5. Problem-solving technique to realize non-stop mode without the assistance of operator;
6. Keeping logs with failures detected and decisions made during measuring to use them in the other applications.

As example of such system, PARSEC and future perspectives of plate scanning will be discussed.