

C O N T E N T S

Balega Yu.Yu. Speech at the opening ceremony of the conference “Magnetic stars” 10

Reviews

Landstreet J.D. Future challenges and opportunities for studies of stellar magnetism 11

Stępień K. Evolution of physical parameters of magnetic BpAp stars 19

Romanyuk I.I. Magnetic field of CP stars. Observational aspects 33

Kochukhov O. Modelling Stokes parameter spectra of CP stars 64

Žižňovský J. Photometric variability of CP stars 85

Zverko J. Spectrum variability of CP stars (Review) 88

Magnetic fields of CP stars. Observations

Kudryavtsev D.O., Romanyuk I.I., Elkin V.G. New magnetic CP stars 93

Wade G.A., Landstreet J.D., Hensberge H., Bagnulo S., Szeifert T., Lo Curto G.
A search for magnetic Ap stars in young open clusters using the ESO VLT 101

*Wade G.A., Abécassis M., Aurière M., Donati J.-F., Lignères F., Marsden S., Mouillet D.,
Paletou F., Petit P., Toqué N., Monin D., Landstreet J.D., Bagnulo S., Lüftinger T.* No
weak magnetic field detected in the variable HgMn star α Andromedae 108

*Aurière M., Silvester J., Wade G.A., Bagnulo S., Donati J.F., Johnson N., Landstreet J.D.,
Ligni F., Lüftinger T., Mouillet D., Paletou F., Petit P., Strasser S.* A survey of Ap stars
for weak longitudinal magnetic fields 114

Wade G. A., Smolkin S., Romanyuk I.I., Kudryavtsev D. Monitoring magnetic fields of
sharp-lined Ap stars with the 6 m telescope 121

Magnetic fields of CP stars. Modeling

Khokhlova V. L. An attempt to use the Stokes profiles I and V of the H_α line to
determine the magnetic field configuration in three strongly magnetic CP stars 128

Glagolevskij Yu.V., Gerth E. A quadrupole model of the magnetic field of β CrB 142

Gerth E., Glagolevskij Yu. On generating and derived magnitudes of stellar magnetic fields 152

Gerth E., Glagolevskij Yu.V. Phase curves and line profiles of stellar magnetic fields related to the Stokes parameters I, Q, U, V 166

Khan S. The new code of spectrum synthesis in magnetic stellar atmospheres with stratification of abundances 175

Kaplan L.G. On formation of a magnetic field by vortical processes in stellar plasma 182

Chemical composition of CP stars

Mikulášek Z., Zverko J., Romanyuk I. I., Žižňovský J., Elkin V.G., Kudryavtsev D.O. Spectroscopic study of the Am SB2 eclipsing binary HR 6611 191

Glagolevskij Yu.V., Leushin V.V., Kevlishvili A.G., Filonova S.V., Chountonov G.A. Spectrophotometry of the He-weak star HD 217833 198

Wade G.A., Smolkin S. Detection of nonuniform surface chemical abundance distributions on β Coronae Borealis 205

Chountonov G.A. Searching for the depression at 5200 Å in some HgMn stars 210

Catalog of magnetic measurements

Bychkov V.D., Bychkova L.V., Madej J. Averaged stellar effective magnetic fields. A catalog 212

Bychkov V.D., Bychkova L.V., Madej J. Chemical composition and magnetic fields of Ap stars 216

Bychkov V.D., Bychkova L.V., Madej J. Averaged magnetic phase curves. A catalog 221

Bychkov V.D., Bychkova L.V., Madej J. Averaged magnetic phase curves. Analysis of the catalog 225

Non-CP magnetic stars

Yakunina G.V., Delone A.B., Porfir'eva G.A., Smirnova O.B. Magnetic field and nonthermal velocities in different coronal formations on the Sun 230

Krtička J., Kubát J. Multicomponent stellar winds of He chemically peculiar stars 234

Plachinda S. General magnetic field on convective stars 241

Butkovskaya V., Plachinda S. Study of magnetic fields of different luminosity hot stars 247

Kholtynin A., Brown J., Fabrika S., Surkov A. Magnetic field connected fast line profile variability in spectra of bright O supergiants 250

<i>Nalezyty M., Madej J.</i>	Mass distribution of massive magnetic white dwarf stars	259
<i>Śliwiński M.S., Krzyczkowska L.I.</i>	The movie about the magnetism in isolated white dwarfs	268
<i>Somov N.N., Somova T.A., Bonnet-Bidaud J.M., Mouchet M.</i>	Step-like variations in the optical spectrum of the magnetic cataclysmic variable EU UMA (RE1149+28)	272
<i>Somova T.A., Somov N.N., Bonnet-Bidaud J.M., Goranskij V.P., Barsukova E.A.</i>	Time-resolved spectroscopy and photometry of the eclipsing polar HU Aquarii(=RXJ2107-05)	279
<i>Chountonov G.A.</i>	New equipment for measuring stellar magnetic fields at the 6 m telescope	286
In memory of Vera L'vovna Khokhlova		292