

revista mexicana de astronomía y astrofísica

Volumen 23, marzo 1992

INTRODUCTION	5
ORGANIZING COMMITTEES	6
LIST OF PARTICIPANTS	7
ATOMIC AND MOLECULAR DATA	
CALCULATION OF DETAILED ATOMIC DATA USING PARAMETRIC POTENTIALS <i>C.A. Iglesias, F.J. Rogers, and B.G. Wilson</i>	9
THE OPACITY PROJECT – COMPUTATION OF ATOMIC DATA <i>M.J. Seaton et al.</i>	19
ATOMIC AND MOLECULAR DATA FOR OPACITY CALCULATIONS <i>R.L. Kurucz</i>	45
MOLECULAR OPACITY DATA FOR STELLAR ATMOSPHERES <i>U.G. Jørgensen</i>	49
CALCULATION OF TRANSITION FREQUENCIES AND LINE STRENGTHS OF WATER FOR COOL STAR OPACITIES <i>S. Miller, J. Tennyson, and J. Fernley</i>	63
MOLECULAR DATA FROM SOLAR SPECTROSCOPY <i>N. Grevesse and A.J. Sauval</i>	71
WHAT CAN MOLECULAR SPECTROSCOPY TELL US ABOUT HOT BANDS? <i>G. Graner</i>	79
RELATIVISTIC FREE-FREE GAUNT FACTORS FOR HIGH-TEMPERATURE STELLAR PLASMAS <i>N. Itoh</i>	91
LOCAL-SCALING DENSITY FUNCTIONAL THEORY: PROSPECTS FOR APPLICATIONS TO THE ELECTRONIC STRUCTURE OF ATOMS <i>E.V. Ludeña and E.S. Kryachko</i>	95
THE OPACITY PROJECT – THE TOPBASE ATOMIC DATABASE <i>W. Cunto and C. Mendoza</i>	107
MOGADOC – A PERSONAL COMPUTER DATABASE FOR ATMOSPHERIC AND INTERSTELLAR MOLECULES IN MICROWAVE SPECTROSCOPY AND RADIO ASTRONOMY <i>J. Vogt</i>	119

EQUATION OF STATE

THE OPACITY PROJECT – EQUATION OF STATE	<i>D. Mihalas</i>	127
EQUATION OF STATE OF PARTIALLY-IONIZED PLASMAS IN THE PHYSICAL PICTURE	<i>F.J. Rogers and C.A. Iglesias</i>	133
THE EQUATION OF STATE FOR STELLAR ENVELOPES: COMPARISON OF THEORETICAL RESULTS	<i>W. Däppen</i>	141
MOLECULAR EQUILIBRIUM IN STARS	<i>T.R. Carson</i>	151

OPACITIES

RESULTS OBTAINED USING THE OPAL CODE	<i>C.A. Iglesias and F.J. Rogers</i>	161
THE OPACITY PROJECT – RESULTS FOR OPACITIES	<i>Yu Yan</i>	171
THE OPACITY PROJECT – A POST-SCRIPT	<i>M.J. Seaton</i>	180
“FINDING” THE “MISSING” SOLAR ULTRAVIOLET OPACITY	<i>R.L. Kurucz</i>	181
REMAINING LINE OPACITY PROBLEMS FOR THE SOLAR SPECTRUM	<i>R.L. Kurucz</i>	187
SAMPLING METHODS	<i>U.G. Jørgensen</i>	195
MOLECULAR OPACITIES IN M-STAR ATMOSPHERES	<i>F. Allard, M. Scholz, and R. Wehrse</i>	203
MOLECULAR OPACITY AND STELLAR STRUCTURE	<i>T.R. Carson, G. Luo, and C.M. Sharp</i>	217
HYDROGEN OPACITIES AT HIGH DENSITIES	<i>P. Lenzuni and D. Saumon</i>	223
ELECTRON CONDUCTION OPACITY FOR DENSE STELLAR PLASMAS	<i>N. Itoh</i>	231

ASTRONOMICAL PROBLEMS

OPACITY PROBLEMS IN ACCRETION DISKS AROUND YOUNG STELLAR OBJECTS	<i>N. Calvet</i>	235
MODELS FOR STELLAR WIND OF EARLY-TYPE STARS	<i>R. Blomme</i>	241
THE EFFECTS OF LINES ON THE MEAN OPACITIES IN NOVAE, SUPERNOVAE, AND ACCRETION DISKS	<i>R. Wehrse, B. Baschek, and G. Shaviv</i>	247
RADIATIVE OPACITIES AND STELLAR PULSATIONS	<i>N.R. Simon and S.M. Kanbur</i>	253

INDICE DE AUTORES/AUTHORS' INDEX		259
---	--	------------