

C O N T E N T S

G. VOLTA	Preface: Course Presentation	vii
C.W. TROWBRIDGE	Overview of the 'State of the Art' in Electromagnetic Analysis and Design	1
K.R. RICHTER W.M. RUCKER	Numerical Foundations, Integral Methods and Applications.....	29
J.F. EASTHAM D. RODGER	Differential Methods, Finite Elements and Applications.....	51
G. MOLINARI	Classification of Software Available and Criteria of Approach.....	81
G. MOLINARI	Guidelines for an Effective Usage and Procedures of Validation.....	101
J.C. SABONNADIERE	Electromagnetic Design Solutions.....	121
J.C. VERITE	Advanced 3D Electromagnetic Formulations and Applications.....	137
R. ALBANESE G. RUBINACCI	Computational Methods for the Electromagnetic Analysis in Fusion Devices.....	161
E. COCCORESE R. MARTONE	Electromagnetic Problems in Fusion Reactor Design.....	189
Y.R. CRUTZEN	Electromagnetic Analysis Applied to the Tokamak First Wall Design.....	215
S. PAPADOPOULOS N. SIAKAVELLAS Y.R. CRUTZEN	Some Recent Developments in 3-D Transient Magnetostuctural Computations in the Frame of the TESLA Laboratory.....	233
J. SCHNEIDER	Numerical Approach in Modeling the Electric Arc.....	239
K. BETZOLD	Applications of Electromagnetic Analysis to Non Destructive Testing.....	247