

Bul. Ştiinţ. Univ. Baia Mare, Ser. B,
Matematică-Informatică, Vol. XVIII(2002), Nr. 1, 15 - 22

Dedicated to Costică MUSTĂŢA on his 60th anniversary

LOW ORDER STABLE SEMI-EXPLICIT RUNGE-KUTTA METHODS

Iulian COROIAN

Abstract. Low order semi-explicit Runge-Kutta methods are discussed and the A-stability and the L - stability of these methods are studied.

MSC 2000: 65L06, 65L20

Keywords: semi-explicit (diagonally implicit) Runge-Kutta methods, stability function A-stability, L- stability.