

Construction of general linear methods of order p and stage order $q = p - 1$ or $q = p$ for ordinary differential equations

Michał Braś (AGH University of Science and Technology, Krakow)

This is a sequel to the talk by Z. Jackiewicz: “Efficient general linear methods for ordinary differential equations”. In this talk we present examples of highly stable general linear methods with s internal stages and $r = s + 1$ internal stages of order $p = s + 1$ and stage order $q = s$ or $q = s + 1$ for $p = 2, 3$, and 4. We will also discuss local error estimation for these methods.