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**Title:** Splitting methods with complex coefficients

**Abstract:** Splitting methods constitute a powerful tool for the numerical integration of differential equations, either arising directly from dynamical systems or from partial differential equations of evolution previously discretized in space.

Efficient high-order schemes have been designed that provide accurate solutions whilst preserving some of the most salient qualitative features of the system. The presence of negative coefficients in methods of order greater than two, however, restricts their application to, e.g., equations defined in semigroups, thus motivating the exploration of splitting methods with complex coefficients with positive real part.

We will present an overview of this type of schemes and some of their more relevant features.