Spectral solution of Delay Differential Equations with application to the COVID-19 spread in Italy

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Recently [3–6] spectral methods in time for the numerical solution of many kinds of differential equations have been considered and analysed. In this talk, the use of spectral methods in time is extended to cope with Delay Differential Equations (DDEs), where they also proved to be very effective. In particular, we show an application to the mrS_2I_2R model [1], which is used to update the forecast for the COVID-19 epidemic in Italy available at [2].

References

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