13-th Symposium on Recent Trends in the Numerical Solution of Differential Equations
ICNAAM 2020
18-th International Conference of Numerical Analysis and Applied Mathematics Rhodes (Greece), September 17-23, 2020.

Modeling the COVID-19 spread in Italy

Luigi Brugnano <u>Felice Iavernaro</u> Paolo Zanzottera

Dipartimento di Matematica, Università di Bari, Via Orabona 4, I-70125 Bari (BA), Italy

tel: +39 080 544 2703, email: felice.iavernaro@uniba.it

Recently [1] a new mathematical model has been proposed to predict the evolution of the COVID-19 epidemic in Italy. The model can be regarded as a multi-regional extension of the basic SIR model, and is used to update the forecast of the epidemic available at [2]. In this talk, we present the mathematical formulation of the model, also explaining its use to better understand the features of the epidemic in the country.

References

- [1] L. Brugnano, F. Iavernaro, P. Zanzottera. The hidden side of COVID-19 spread in Italy (2020) arXiv:2006.08356 [q-bio.PE].
- [2] https://www.mrsir.it/en/projections/