

Title: Mathematical modeling of the COVID-19 spread: a case of Turkey
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In this presentation, a mathematical model for the human-to-human transmission of the novel coronavirus disease (COVID-19) is investigated. For this purpose, the total population is classified into eight epidemiological groups, including the super-spreaders. Besides, a local stability analysis in terms of the basic reproduction number and sensitivity analysis of the model for the introduced parameters are studied. The system of nonlinear ordinary differential equations (ODEs) is solved by using the Galerkin finite element method (GFEM). Numerical simulations show that the proposed model is quite convenient for the case of Turkey when used with appropriate parameters.