

Mapping First to Third Wave Transition of Covid19 Indian Data via Sigmoid Function



The screenshot shows the title page of a research paper. At the top left is the journal logo for 'Nonlinear Dynamics and Applications'. The title of the paper is 'Mapping First to Third Wave Transition of Covid19 Indian Data via Sigmoid Function'. Below the title are the authors' names, 'Supriya Mondal & Sabyasachi Ghosh', and their portraits. The paper is identified as a 'Conference paper' first online on '06 October 2022' with '213 Accesses'. On the right side, there is a blue button for 'Access via your institution' and a price tag for 'EUR 29.95'. Below the price, it states 'Price includes VAT (India)'. There are also two bullet points: 'DOI: 10.1007/978-3-030-99792-2_117' and 'Chapter length: 11 pages'.

Dr. Sabyasachi Ghosh and his research group have attempted to fit the three waves, noticed in the corona virus data of India from 2020 to 2022, by using a simple mathematical model in terms of three Sigmoid functions. Their interesting observation is that 3 virus - (1) Covid19, and its mutated variants (2) Delta, (3) Omicron have their own spreading/infection parameters (0.04, 0.08, 0.12) and half-life times (192, 96, 134 days), which are basically fixing their respective peak values of daily cases and maximum values of cumulative cases. Their model also unfolded the hidden Sigmoid profile of Delta+ virus in between Delta and Omicron, which did not appear as a wave but was responsible for saturation of daily cases for a few months.

