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Neural networks have gained much attention for their effectiveness in various applications. However, they typically lack a predetermined structure, and their properties are often not well understood. To address this issue, it may be desirable to incorporate properties of the target function or data being processed into the design of the neural network. Having a systematic approach to designing structured networks can be highly beneficial. In this talk, we present a framework combining ODEs, and suitable numerical methods can be employed to model neural networks with specific properties. Additionally, we offer some particular applications of this approach to data-driven modelling and the problem of approximating solutions of ODEs.