Excitation of Solar Oscillation and Turbulent Convection

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We review possible candidates for the solar p-mode oscillation. The κ mechanism is well established, and known to be responsible for classical stellar pulsation. An alternative excitation mechanism is stochastic excitation by turbulent convection. We review properties of observational solar oscillations, and show that it naturally explains the observation of the solar p-mode oscillations. Stochastic excitation by convective envelop is also known as a common excitation mechanism for multi-mode oscillations of late-type stars. It is also demonstrated that a few attempts are being undertaken to reveal new aspects of the oscillation. We address how one may learn about turbulent convection by studying solar oscillations. It may be achieved by analysis of their power spectrum, in terms of its shape and/or amplitude.