The Phenomenon of Doppler in Modern Science

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The Doppler effect expresses the dependence of wave frequency or the shift of spectral lines on the relative motion of a source and observer. It belongs to the most important physical phenomena and supplies a powerful tool for experiments and astronomical observations. It is deeply rooted in modern relativistic and quantum physics, connected with supersonic supraluminous and non-linear motions.

This effect was predicted in a doubtful and rather speculative way by Christian Doppler in Prague in 1842. It took a long time before this idea was accepted and recognised by the scientific community. From the history of science standpoint, Christian Doppler himself, a man of great visions and fantasy which often lead him to erroneous conclusions, represents a phenomenon of his own.