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## Coherent active THz phase modulation during Optical Rectification process for THz particle accelerators

*Wednesday, 18 September 2019 19:00 (1 hour)*

In this work, I will theoretically show how the phase modulation of the infrared pump pulse, used to generate the terahertz radiation via the Optical Rectification Process (OR) in the regime of weak-pump signal, affects the amplitude and the phase of the resulting THz field. I will also discuss the effects of THz generation under strong-pump signal. This theory can be used in many practical applications where a coherent control of the THz field is required as for example for the direct acceleration of electrons.

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