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# Ultrafast photo-induced dynamics of molecular materials under high pressure

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## 1 State of the art [1]

For a long time, the study of photo-induced phase transition was restricted to the sole use of temperature as external control parameter. Recent studies have demonstrated the possibility to add the use of hydrostatic pressure to explore the phase diagram of material. The idea is to look for parts of the phase diagram near critical points where gigantic photo-response may occur.



**Example of complex phase diagram (P,T) of molecular material** 

Goals

- Exploring the Pressure Temperature Phase Diagram of Molecular Material
- Seek for peculiar the Photo-Induced Dynamics in well defined parts of the Phase Diagram



