

Excitons in transition metal dichalcogenide monolayers : *Dynamics and Spin-valley physics*

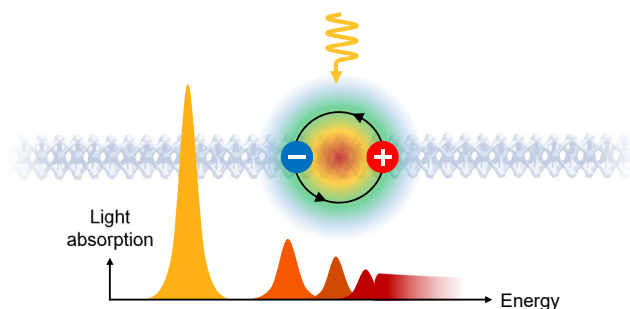
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The optical properties of transition metal dichalcogenide monolayers are dominated by excitons, electron and hole pairs bound by Coulomb attraction. In this talk we review what we learn from linear and non-linear optical spectroscopy of these atomically thin semiconductors for applications in optoelectronics and fundamental physics exploring spin and valley properties.



References:

- [1] “Excitons in atomically thin transition metal dichalcogenides” G. Wang et al, Reviews of Modern Physics 90, 021001 (2018)
- [2] “Two-dimensional semiconductors in the regime of strong light-matter coupling” Ch. Schneider et al, Nature Comms (in press) arXiv:1804.06771