

Theoretical studies of physical interpretations of angular resolved photoemission for free molecules.

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Molecular-Frame Photoelectron Angular Distribution (MFPAD) enables us to measure the Photoelectron Angular Distribution of molecules as if fixed in space. We have investigated theoretical aspects of MFPAD based on Multiple Scattering Theory. [1-3] In this talk, we show our recent studies considering to apply ultrashort laser pulses for MFPAD.

References

- [1] F. Ota *et al*, J. Phys. B **54**, 024003 (2021), *ibid.*, 084001, *ibid.*, 244002.
- [2] F. Ota *et al*, Phys. Chem. Chem. Phys. B **23**, 20174 (2021).
- [3] I. Vela-Peréz *et al*, Phys. Chem. Chem. Phys. B **25**, 13784 (2023).