# Deeply Virtual Compton Scattering on Spin-1 Targets

F. Cano[a] and B. Pire[b]

[a] *DAPNIA/SPhN, CEA-Saclay, F-91191 Gif Sur Yvette Cedex (France).*
[b] *CPhT, École Polytechnique, F-91128 Palaiseu (France)*

The formalism of Generalized Parton Distributions has been recently extended to the case of the deuteron and, in general, to spin-1 targets [1]. It was also pointed out the unique way in which deep exclusive processes probe the interplay between parton and nucleon degrees of freedom in the deuteron wave function. We will present numerical predictions for cross sections and asymmetries in Deeply Virtual Compton Scattering and Deeply Exclusive Meson Production on Deuteron targets. We will show results for kinematic regions of current interest for experimental facilities (JLab, HERA). We will discuss the limits of validity of our approach (impulse approximation and relativistic light-cone wave functions for the deuteron) and which improvements can be implemented.

**References**

[1] E.R. Berger, F. Cano, M. Diehl and B. Pire, Phys. Rev. Lett. **87** (2001) 142302.