

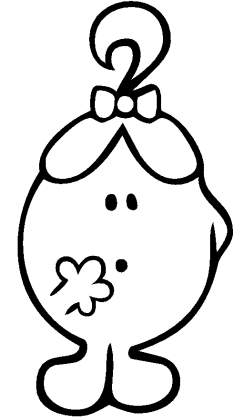
Introduction

Marie Boër, LANL



I am from Toulouse, here !

I also spent the last 10 years in Paris, 2 years in Poitiers, 4 years in Munich, Germany when was a kid, and now few month in the US (Virginia, then New Mexico)...



What I did as a student in Paris 6 University ? (2005 – 2011)

- 2008: Bachelor in Chemistry, major = inorganic chemistry
- 2009: Bachelor in Physics, major = fundamental physics
- 2011: Master of Physics, "Nuclei, Particle, Astroparticle, Cosmology", major: particle physics

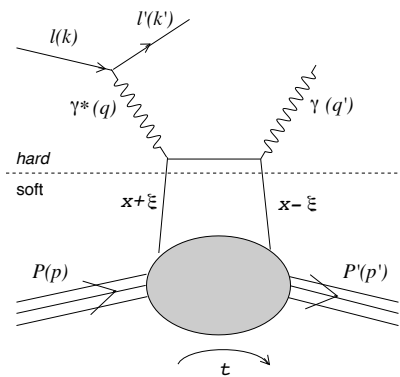
However, my main activity at that time, between 2003 & 2009 was sport !

I was member of National Institute of Judo and of Sainte Geneviève Sport Club and spent much of my time training and doing competitions.

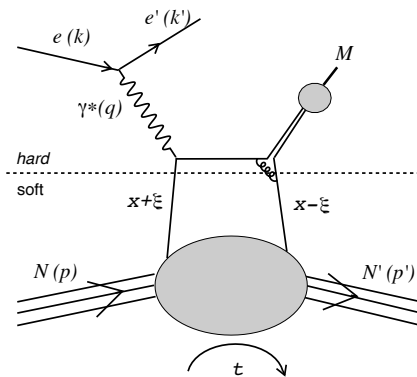
As personal activities I also like hiking, playing piano, cultural visits... and good french food!

And then I started my PhD... (Université Paris 11 Orsay, 10/2011 – 11/2014)

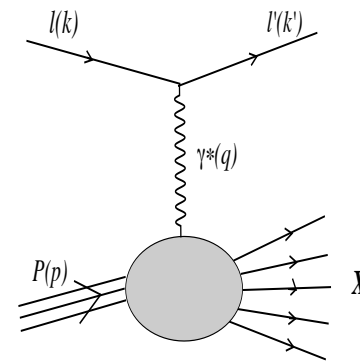
- first part : analysis with COMPASS CEA Saclay group, GPD subgroup.
 - measurement of DVCS and exclusive π^0 cross sections
 - measurement of luminosity and F2 structure function



DVCS

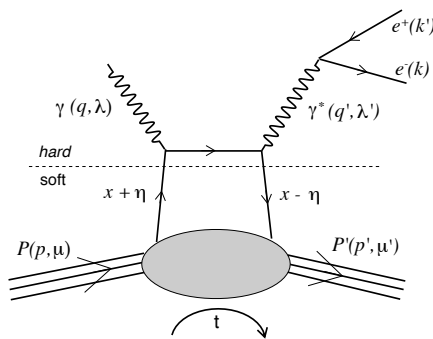


hard exclusive meson production

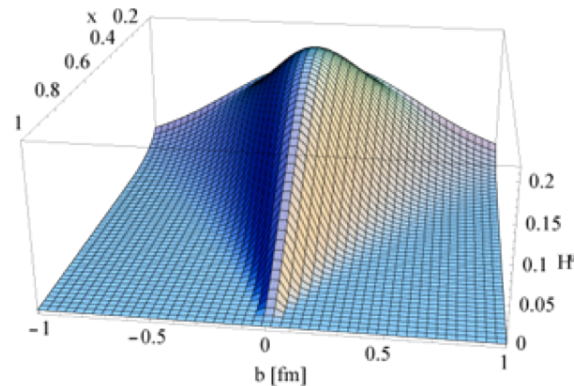


DIS

- second part : phenomenology of Timelike Compton Scattering, GPD physics.
 - calculation of observables and phenomenology of TCS
 - development of fitter code for TCS+DVCS to extract Compton Form Factors, study of what can be achieved with various observables and reactions + experimental conditions



TCS



impact parameter distribution from GPD H in VGG framework (M. Guidal)

- Teaching: statistical physics, quantum mechanics, classical mechanics...

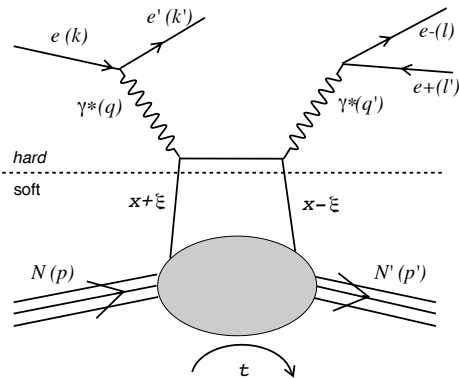
One more year after my PhD working on GPD physics:

- teaching position at Université Paris 11, Orsay (11/2014 – 08/2015)
- spent some time in JLab (till 02/2016)

- Research activities:

- wrote DEEPGen: Deep Exclusive Electro- and Photoproduction of lepton pairs Generator (for TCS and DDVCS + associated Bethe-Heitler, upgradable for exclusive meson processes)
- develop proposals with JLab collaborators
- 2 intern students from Orsay working on DDVCS (1 on analysis, 1 on event generator)

- approved proposal for TCS cross section and BSA measurement with SoLID Hall A (2015)
- LOI for TCS using transversally polarized target with NPS Hall C (2015)
- LOI for DDVCS cross section and BSA measurement with SoLID (2015) and with CLAS12 Hall B (2016)



double – DVCS: DDVCS

Then started to work on Phenix with the Los Alamos group

DY analysis using 2015 pp and pA data