

Who we are, and what we do

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Děčín

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Evolution

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In 2018, we had the first meeting (<https://indico.fjfi.cvut.cz/event/90/>)

There were 10 participants

We discussed mainly

- the techniques we use in our work

- several new papers which appeared recently in arxiv

It was a two day meeting: 4 working sessions, one of discussion

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In 2023, we are 18 participants :)
There are 7 sessions and naturally the range of topics has changed.
We still try to share what we are doing, but now mainly at the level of a full analysis.
Sadly, we have lost the reviewing of new papers, which is a crucial part of the scientific activity
Happily, we have added talks on other subjects not necessarily close to our own studies

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The spirit has not changed: we want to understand Nature and have fun while doing it!
And we want to use all the tools in the arsenal: theory, data analysis, instrumentation

Main focus of our research

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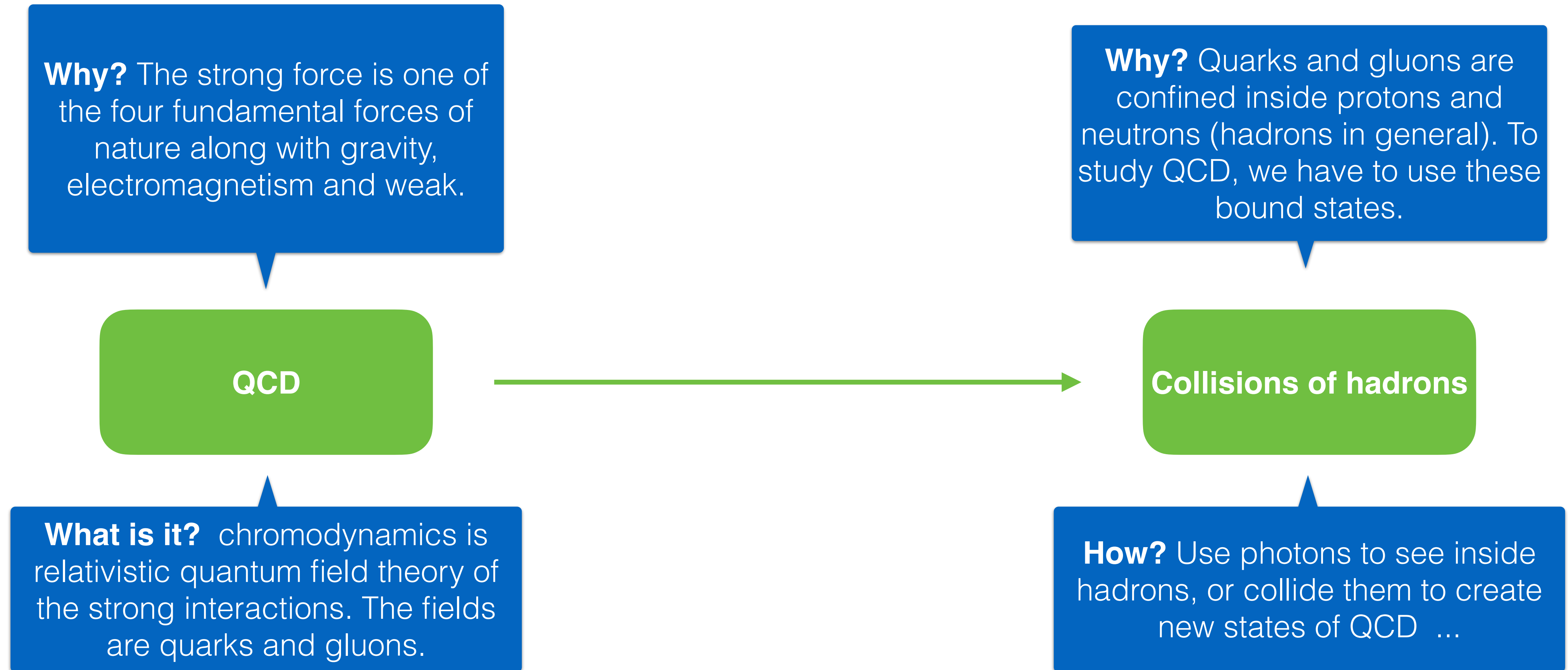
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Why? Quarks and gluons are confined inside protons and neutrons (hadrons in general). To study QCD, we have to use these bound states.

Collisions of hadrons

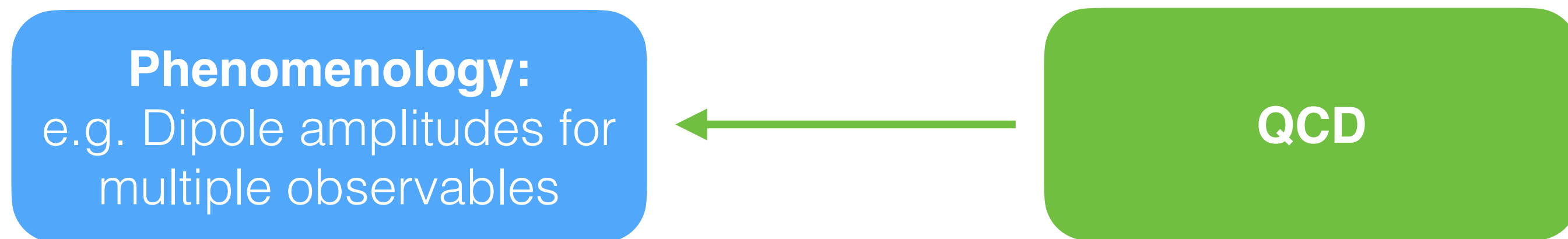
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Specific areas of research

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Phenomenology:
e.g. Dipole amplitudes for multiple observables

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graph LR; QCD[QCD] --> Phenomenology[Phenomenology: e.g. Dipole amplitudes for multiple observables];
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Analyse the data recorded with an experimental facility (ALICE+LHC) to measure those observables

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Detectors:

Improve our local lab. and develop synergies with Petr and Jarda

Develop new plastics :)

Keep our detectors (MFT and FDD) in operation

Start exploring new detectors (MUON ID, ITS3)

Write a couple of projects ... keep your fingers crossed!

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- Discover that 3D BK needed a new set of numerical tricks and learning them
- Explore saturation in the hot-spot model
- Matej to explore more formal QCD aspects in France
- Starting to come back to full NLO BK ...

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Marek is back :))

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Náš Roman byl jmenován vedoucím PAG-UPC :)))