Reflections on evolving Capra

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Outline

- I was type-caste to give the windup talk?
- What is happening to Capra?
- The rôle of youth in the future of Capra!
- but first:
  - What have I really been doing recently?

High precision and post-Newtonian expansions

- Solving in terms of sums of functions; discuss
- Heavily dependent on machine algebra; discuss?
- Check and recheck the results; they still stand
- Discuss with PN colleagues, absorb 4PN result
- Making the breakthrough: Seeing the factor π
- Hoping for result (& agreement) from PN theory
- All while being on sabbatical in Paris for a year!

Punctuated History

- 1938 Dirac
- 1960 De Witt
- 1997 MiSaTaQuWa
- Capra begins
- Regularization
- Singular field
- L=0, 1
- Time domain
- Gauge invariants
- Resonances
- Effective sources
- Scaling Limit
- Kerr black hole
- PN/EOB impact
- Second order
- Evolution

Rôle of Youth

- Diverse backgrounds
- Bring new ideas
- New work-force
- Highlight new problems
- Education and re-education
- Pinpoint the progress

Plenaries

- Evolution- progressing; two-timing to come?
- Motivation - LISA - delayed; EMRIs OK?
- Kerr background - low multipole problems
- Second order - well defined, evolving orbit
- EFT - should we ask it to do 2nd order?
- Extended Bodies - formal, non-perturbative

Other talks

- Dominated by young researches
- Missing:
  - Adrian
  - Chuck
  - Eric
  - Leor
  - Steve
- Why me?

Topics for discussion

- Evolution
- Second order
  - Moving source?
- Functional methods
  - Way of the future
- Gauge and Kerr issues
- m=0 and m=1?
- Multiple approaches?
- Machine algebra?

Thank You

- Reviewers - useful for new arrivals
- Speakers - useful for the entrenched
- Everyone here - young, growing community
- Organizers
  - choice of plenary speakers
  - suggestion of discussion topics