Excellence: writing the research proposal

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Researcher — Project — Presentation
Layout and language — Other issues
The researcher

- Experience: past accomplishments
- Creativity: ability to see beyond the obvious
- Intellectual capacity: can develop ideas, crack problems
- Reliability & commitment: will deliver on promises
- Independence vs. team work: not all articles with the same coauthors
- Old vs. new collaborators for project
  Why do you want to come/go specifically to Karlsruhe?
- MSCA Individual Fellowship: career development, e.g. to attain professional independence

No false modesty, but remain credible
The project

- Quality and credibility of research
- Level of novelty
- Explain why your scientific approach is feasible
- Explain why the methodology you propose is appropriate
- Have a clear end goal for your project
  – but also visions beyond
- Show why the project helps solve an important problem or fills a need, e.g. in the experimental community
- Acknowledge a dynamic world; targets may shift
  If new physics is found at the LHC, then . . .
- MSCA Individual Fellowship: quality of training and supervision

Set ambitious but realistic targets
The presentation

- Who is the reader? What spread of levels? Phenomenologist — particle physicist — physicist — natural scientist — academic?
- Smooth transition from popular introduction to expert level.
- Place your work in context: show the state of the art and originality of your project
- Show why your experience and potential equips you to deliver your project
- Don’t ignore the competition – show why you are better
- Take help to check presentation

Tell a credible story
Layout and language

- Clear, organized structure (easy to find your way, to go back)
- Headings, subheadings, bulleted lists, . . .
- Avoid excessive *italics*, **boldface** or _underline_ in running text
- Spacious impression: font size, page size
- Pictures, diagrams, tables to highlight key points

- Clean & legible figures (older readers → reduced eyesight)
- Cultivated but still accessible language (get → obtain)
- Check spelling, with and without spell-checker (lose ≠ loose)
- Take help to check language (especially if non-native)

**Should be readable and flow well**
Other issues

- Good title + good acronym
  Collider Phenomenology and Event Generators ⇒ MorePheno

- Refer to the guidance and evaluation criteria when you are writing your proposal – approach these like exam questions

- Budget: if more than your salary, then table with numbers, but also legible brief summary near the end of the running text

- Work packages or not? Convenient for big collaborations, but straightjacket for the smaller project. Subprojects?

- Distribute full application to writers of recommendation letters

- Start well ahead of deadlines, rewrite, get input, re-rewrite

Take grant writing seriously