JENNIFER2 Summer Schools Initial thoughts and planning

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With many suggestions by Antonio More suggestions and comments are most welcome!

JENNIFER summer schools 2016 & 2018

- Took place in Europe
- 5-days long
- 30 last-year undergraduate students from Europe
- €25k covered accom., meals, < €200 for travel (100% for lecturers)
- Lectures & tutorials on the expected topics and some more:
 - $-\nu$ physics experiment / theory
 - B physics experiment / theory
 - Detectors
 - Statistics
 - Tutorials on DAQ, parallel computing
 - Dark matter
 - Open questions in fundamental physics
 - Cancer therapy

JENNIFER2 summer schools commitment and open questions

- At KEK: Tsukuba & Tokai
 - One school at each location + tour to the other location?
 - Status of undergraduates at KEK (usual procedure requires forms from home institution)
 - Foreign travel insurance, visas when relevant
 - Meals on weekends
- €25k to support ~20 European students
 - Can we organize cheap travel from Europe?
- A similar # of Japanese students
 - To ensure participation (in English), better organize support from Japanese sources
- Lecturers: KEK personnel and JENNIFER2 members on secondments
 - Might necessitate having school adjacent to collaboration meeting
 (Belle II general meeting is in June. Previous schools were end of July. Exam periods?)
 - Theory lecturers from KEK

Lecture topics & hands-on exercises

Obvious topics:

- Neutrino- & quark-flavor theory & experiment
- Detectors & analysis
- The big picture:
 - Flavor physics as a piece of the puzzle, incl. DM, energy-frontier, etc.
- Unusual signatures (direct NP searches) at Belle II & T2K
- The proposal also committed to outreach and communication
 - Need to flesh it out and see how to fit it in busy agenda
- Practical applications
 - Time permitting, lower priority given the goals of the school "to broaden the view of the students and motivate them to consider choosing Belle II and T2K for their PhD studies or postdoc positions"

Schedule

- The logistics necessitates starting early
- Immediately: Form a taskforce:
 - Myself
 - A JENNIFER2, T2K member
 - A member from KEK/Tsukuba
 - A member from KEK/Tokai
 - Administrative support at KEK and in Europe
- Finalize main plans (physics & logistics) in the coming year
- Student application: ~September 2019
 - Students are back from summer vacations