

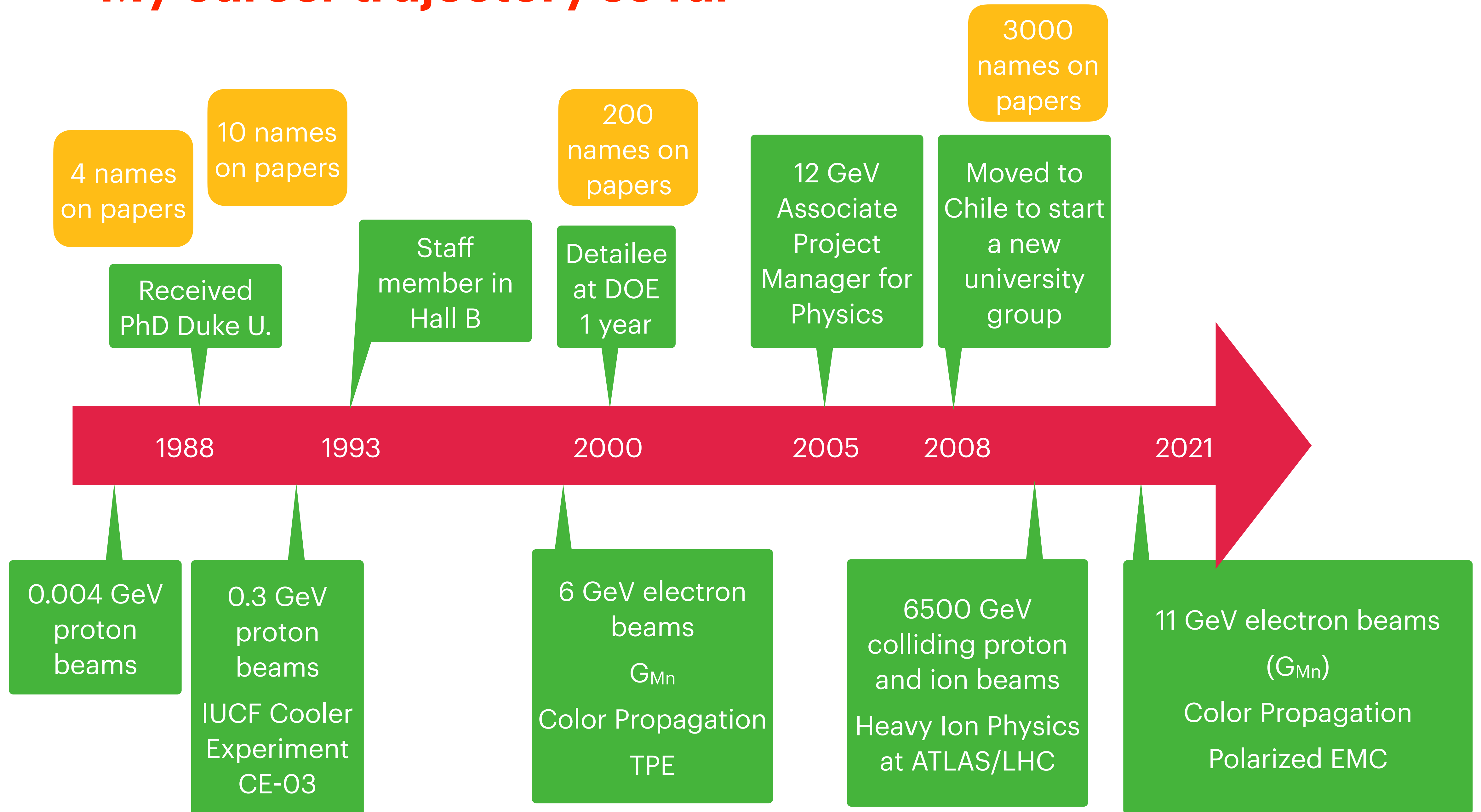
Towards a Collaboration Focus

Will Brooks

CLAS Chair Election Presentation

WB 1 June 2021 v1

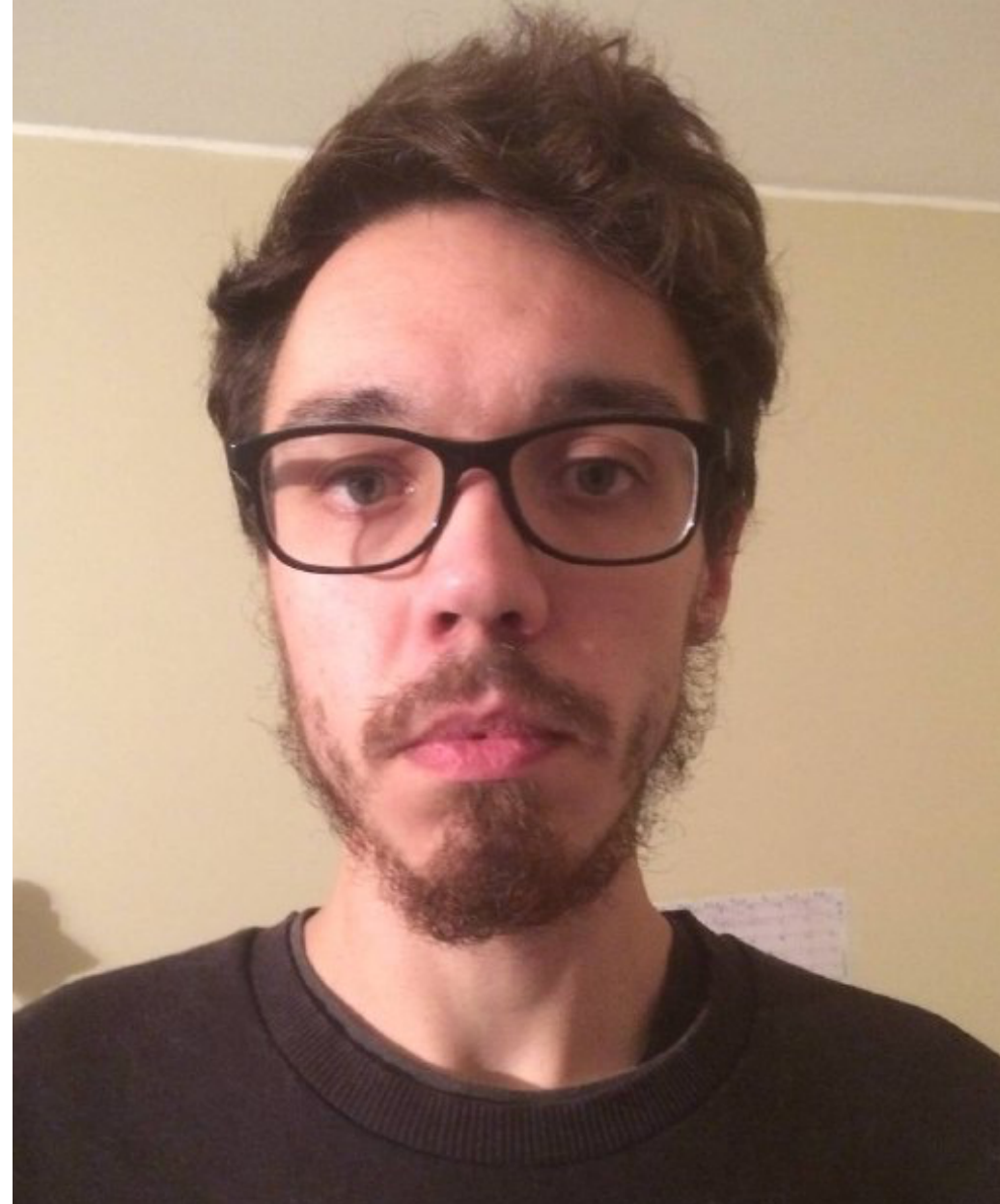
My career trajectory so far



Our CLAS Research Group



Antonio Radic
MSc grad, PhD student



Bruno Benkel
MSc student



Andrés Bórquez
MSc graduate



Marilú Mora
MSc graduate



Juan Pablo Garces
BS graduate



Taisiya Mineeva
Professor



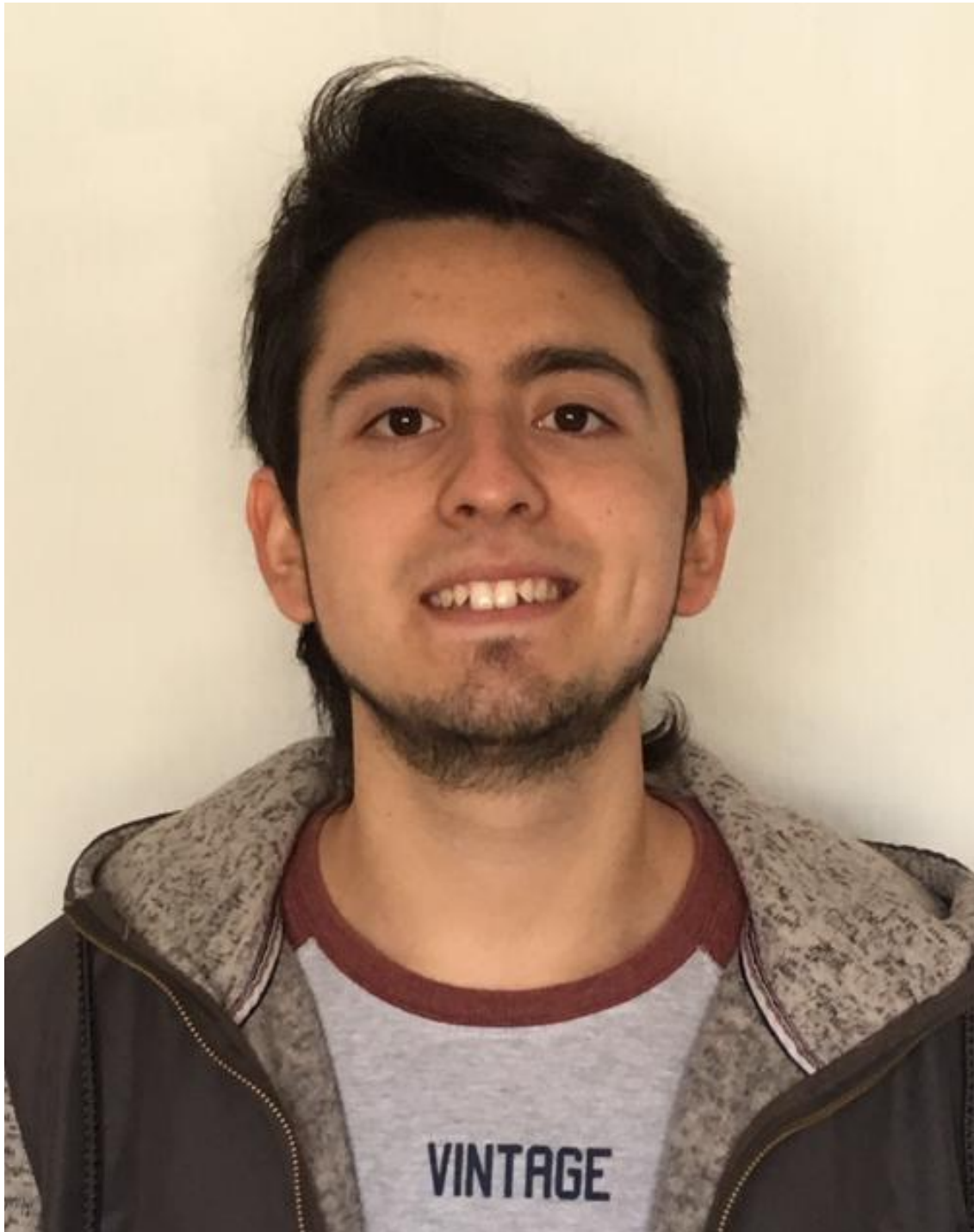
Hayk Hakobyan
Professor



My Ahmed El Alaoui
Senior Researcher



Jorge López
Humboldt Fellow



Claudio San Martín
MSc student



Camilo Castro
BS student



Esteban Molina
MSc student



Gabriela Hamilton
MSc student



René Rios
Engineer



Iñaki Vega
Engineer



Milan Ungerer
MSc graduate



David Aliaga
Engineer

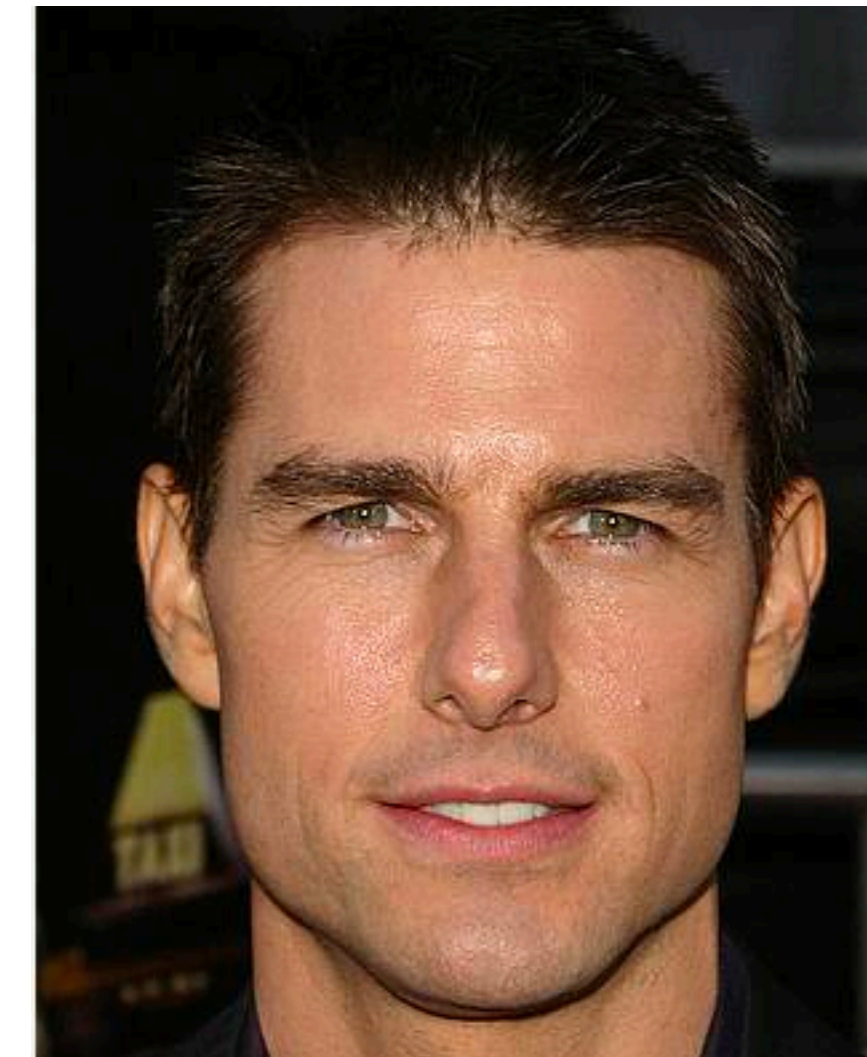
Former students currently working in CLAS



Orlando Soto
INFN Fellow now,
Professor at
U. de La Serena
soon



Miguel Arratia
Professor
U. C. Riverside



Sebastian Morán
PhD Student
U. C. Riverside

From my candidate statement

- Work toward **maximizing efficiency in technical processes** such as detector calibrations, in **analysis reviews**, and in **ad hoc reviews**. In this effort I would draw on the successful experiences and practices from other collaborations, when practical.
- Work to **recruit new research groups** to CLAS12. This may be an opportune time to do so, particularly for groups who want to transition from hadron beam experiments to the EIC over the next decade.
- Work to **increase the visibility** of the CLAS Collaboration in other communities of Nuclear Physics and High Energy Physics, and enhance the resources available to communicate the CLAS physics thrusts to new outsiders.
- Work to **support and promote the careers of young people** in CLAS, from the stage of being a student through the first permanent job in academia or industry.

Work toward maximizing efficiency in technical processes such as detector calibrations, in analysis reviews, and in ad hoc reviews.

- One of the strengths I would bring is that I have been fully immersed in another excellent physics collaboration - ATLAS at the CERN LHC.
- As a mainstream HEP collider collaboration, ATLAS has “collaboration” truly perfected.
- In ATLAS I was a physics working group convener for three years, I was a run coordinator for all heavy ion running (3 weeks) one year, three ATLAS physics papers were completely the work of my three students, and I was on the editorial board for a fourth paper. I am ATLAS National Contact Physicist for Chile and I have had many meetings with all of the past collaboration spokespersons, including on several of their visits to Chile. Message: I have seen the inside of the collaboration and I know a lot about it.
- What are some differences between CLAS and ATLAS?

Work toward maximizing efficiency in technical processes such as detector calibrations, in analysis reviews, and in ad hoc reviews.

What are some differences between CLAS and ATLAS?

- In CLAS, and at JLab in general, anyone is allowed to write and defend a proposal.
 - This is a tremendous strength - anyone with high talent can quickly become known.
- In CLAS, however, there is a strong **Run Group focus**. There is a strong tendency to refer to “your data” and “my data.” Only a few aspects are **centralized** - service task management, shift taking, ad hoc reviews.
- In ATLAS, there is a strong **Collaboration focus**. The things that are centralized are organized that way for the good of the whole collaboration. Examples: experts run the simulations and do quality control, not individuals; individuals propose what should be simulated and get permission for it from the leadership. Experts specify things like particle ID definitions, which everyone must use. Experts design the trigger characteristics, in collaboration with physics groups. **The calibration of more than 100 million detector channels takes 72 hours, vs. in CLAS where it depends on the size of the run group, and can take 2 years for small run groups**, reflecting badly on CLAS and JLab.

Work toward maximizing efficiency in technical processes such as detector calibrations, in analysis reviews, and in ad hoc reviews.

What am I proposing to do?

- I propose to identify **inefficiencies** and their **root causes**, then work toward removing the inefficiencies. Example: analysis reviews. We have a database of analysis reviews that allows study of time required for review. Why do **some take 3-4 years, and others only a few months?** Would a more structured format help?
- Long view vs short view

Work to recruit new research groups to CLAS12

- CLAS12 provides such an amazing opportunity! Large acceptance spectrometer, particle ID via a RICH, fantastic quality electron beam, wide open PAC system where anybody can propose something new.
- There is plenty of room for new ideas and new people. Those new people also bring new service work strength that can build the collaboration.
- For new people who care about the future of their students' careers, there is no better place to learn how to do EIC physics than in CLAS12.

Work to increase the visibility of the CLAS Collaboration

- Neither CLAS, nor even Jefferson Lab, is widely known in the mainstream HEP community.
- Even in the US NP community, awareness of the CLAS and JLab program could be much higher.
- The Speakers Committee is trying to improve that, and they are doing a great job.
- I think we can further enhance the resources available to communicate the CLAS physics thrusts to new outsiders, for instance, by developing high-quality standard slides and images that are widely available for talks, *aimed at newcomers*.
- We can also have a more deliberate and focused effort to place CLAS people on **DNP committees**, where they can network.

Work to support and promote the careers of young people in CLAS, from the stage of being a student through the first permanent job in academia or industry.

- We do this piecemeal already, by various support efforts such as student+postdoc meetings at the CLAS Collaboration meetings
- It would be even better if we have a “lifecycle” mentality - student through first permanent job - and to do it systematically for **ALL CLAS young people**.

Conclusion

- Work toward maximizing efficiency in technical processes such as detector calibrations, in analysis reviews, and in ad hoc reviews.
- Work to recruit new research groups to CLAS12.
- Work to increase the visibility of the CLAS Collaboration.
- Work to support and promote the careers of young people in CLAS, from the stage of being a student through the first permanent job in academia or industry.

Thank you for your attention!