

# Industry Frontier:

## Research Committee December 2021

- ▶ Start collect contacts of PhD students
  - ⇒ Start with a spreadsheet. How can we handle the data protection side of it?
- ▶ Start and maintain a spreadsheet of those interested in industry collaboration. Aim help those who would like to collaborate with industry.
  - ⇒ Discussion started

# Spreadsheet on Interest in Industry Collaborations:

## Discussion started

- ▶ Robert Johnson: Remit & Ethical issues:
  - 1) External collaboration partners outside industry
  - 2) Not willing to work with X for ethical reasons. Put in questionnaire e.g. skillset based "Are there any potential application areas which you would be unwilling to work on?"
  - 3) School policy/statement on ethical collaboration with industry? Some choices of impact could harm individuals and the institution, how do we prioritise and support projects in this regard?
- ▶ BD (Business Development) Team: data file

**Ethical considerations:** Here, we identified one or even the most important barrier!

⇒ Moving towards industry / external engagement strategy.

# Industry Frontier: Remit

## 1) External collaboration partners outside industry

- ▶ In my view: Yes, this should include other external collaborators. It is question of the wording.
  - ▶ industry needs to recognize themselves in the title
  - ▶ other externals as well
- ▶ Proposed title: Industry & External Research Engagement
- ▶ other views / search for good title?

# Industry Frontier: Ethics

2) Not willing to work with X for ethical reasons. Put in questionnaire e.g. skillset based "Are there any potential application areas which you would be unwilling to work on?"

- ▶ questionnaire: Yes, in a more open way: any remarks, e.g. what you would like us not to do...?
- ▶ In my view: The intention here should NEVER be to draw someone into some collaboration but to HELP those into collaborations they are keen to do!
  - (a) Forced collaborations are prone to failure
  - (b) Forced collaborations are prone to damaging our reputation
  - (c) What's more important: We have too many opportunities to take on the wrong ones!
- ▶ Proposed way forward: Take this into an Industry & External Research Engagement Strategy, under "Our Approach", "Our Support"
- ▶ Ideas?

# Industry Frontier: Ethics

3) School policy/statement on ethical collaboration with industry? Some choices of impact could harm individuals and the institution, how do we prioritise and support projects in this regard?

⇒ we need to understand our purpose, what we want to do, how we want to do it, and why, with whom and how.

# Industry & External Research Engagement Strategy

- ▶ Purpose
- ▶ Industry and External Partnerships & Ethics
- ▶ Our Support (to be worked out later)
- ▶ Aims and Measurable Outcomes (to be worked out later)

# Industry & External Research Engagement Strategy

## Purpose

- ▶ Thoughts
  - ▶ Connect (open up new perspectives)
  - ▶ Learn (How is mathematics used? What is current practice? What are current paradigms? What are urgent needs?)
  - ▶ Enable (What: Research and impact; How: Prove impact, enhance grant success chances, direct funding, indirect funding)
  - ▶ Give (What: insights, expertise, knowledge, skills, prestige; Why: to advance society based on our values)
- ▶ Procedure
  - ▶ To define, see next point:
- ▶ Action
  - ▶ Discuss: changes?
  - ▶ Put the result down in the right form, what form?

# Industry & External Research Engagement Strategy

## Industry and External Partnerships & Ethics

- ▶ Thoughts
  - ▶ Act based on our values: But what are our values? How do we define and protect them?
  - ▶ Questions to help us identify partners that may advance our school  
These are mainly from ATI and we will need to adapt them further to our case:  
Attitude? Articulation? Alignment? Resources?
- ▶ Procedure
  - ▶ to be defined, see next item
- ▶ Action
  - ▶ Discuss way forward,
  - ▶ Work out set of questions,
  - ▶ Define procedure,
  - ▶ Put the result down in the right form, what form?



# Industry & External Research Engagement Strategy

Industry and External Partnerships & Ethics: Work out questions based on ATI's list, to understand if an external entity may advance our school:

- \* **Attitude:** Curious and open minded? Collaborative? Willing to tackle challenges and to break new ground?
- \* **Articulation:** Clear goals? Clarity on IP early on? Clear legal and commercial processes? HERE IS SPACE TO ARTICULATE OUR VALUES
- \* **Alignment:** Synergy? Long-term perspective? HERE IS SPACE TO ARTICULATE OUR VALUES
- \* **Resources:** Willingness to spend time with us? To share other resources such as for instance insight, expertise, data, devices, venues for events etc? Direct funding?