Tips for a successful Marie Curie application

Jonathan Shock - MPI for physics, Munich
(Dr Johanna Erdmenger)

String theory (AdSCFT Munich - starting Jan 2011)

Southampton...Beijing...Santiago de Compostela...Munich

Meta-advice

Meta-advice

- Start **early** - leave time to breath so that you can look with **fresh** eyes.

Meta-advice

- Start **early** - leave time to breath so that you can look with **fresh** eyes.
- Read other applications, but be **individual**.

Meta-advice

- Start **early** - leave time to breath so that you can look with **fresh** eyes.
- Read other applications, but be **individual**.
- Get as many friends/family members to read your application as you can without making enemies!

Meta-advice

- Start **early** - leave time to breath so that you can look with **fresh** eyes.
- Read other applications, but be **individual**.
- Get as many friends/family members to read your application as you can without making enemies!
- Get advice from the **National Contact Points and the fantastic staff here** - they are amazing! (contact them early - build rapport).

Questions to ask yourself

Questions to ask yourself

Questions to ask yourself

- **Who** is going to read this?: Detail versus clarity.

Questions to ask yourself

- **Who** is going to read this?: Detail versus clarity.
- What is **unique** about me, what is unique about the host institution?

Questions to ask yourself

- **Who** is going to read this?: Detail versus clarity.
- What is **unique** about me, what is unique about the host institution?
- How is this going to affect my **future** AND that of the EU?

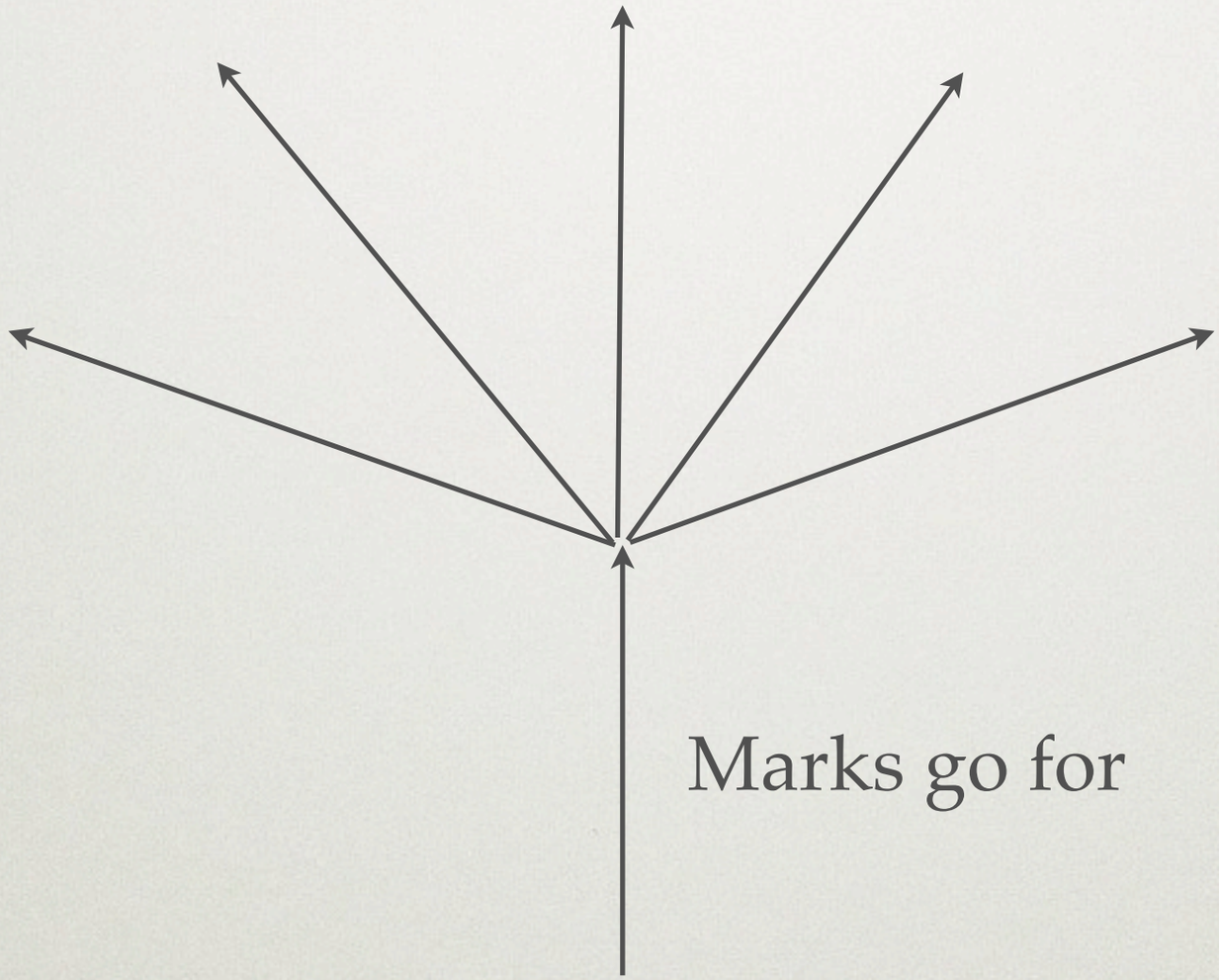
Questions to ask yourself

- **Who** is going to read this?: Detail versus clarity.
- What is **unique** about me, what is unique about the host institution?
- How is this going to affect my **future** AND that of the EU?
- This is not a present - how do I sell myself as a **profitable investment**?

Questions to ask yourself

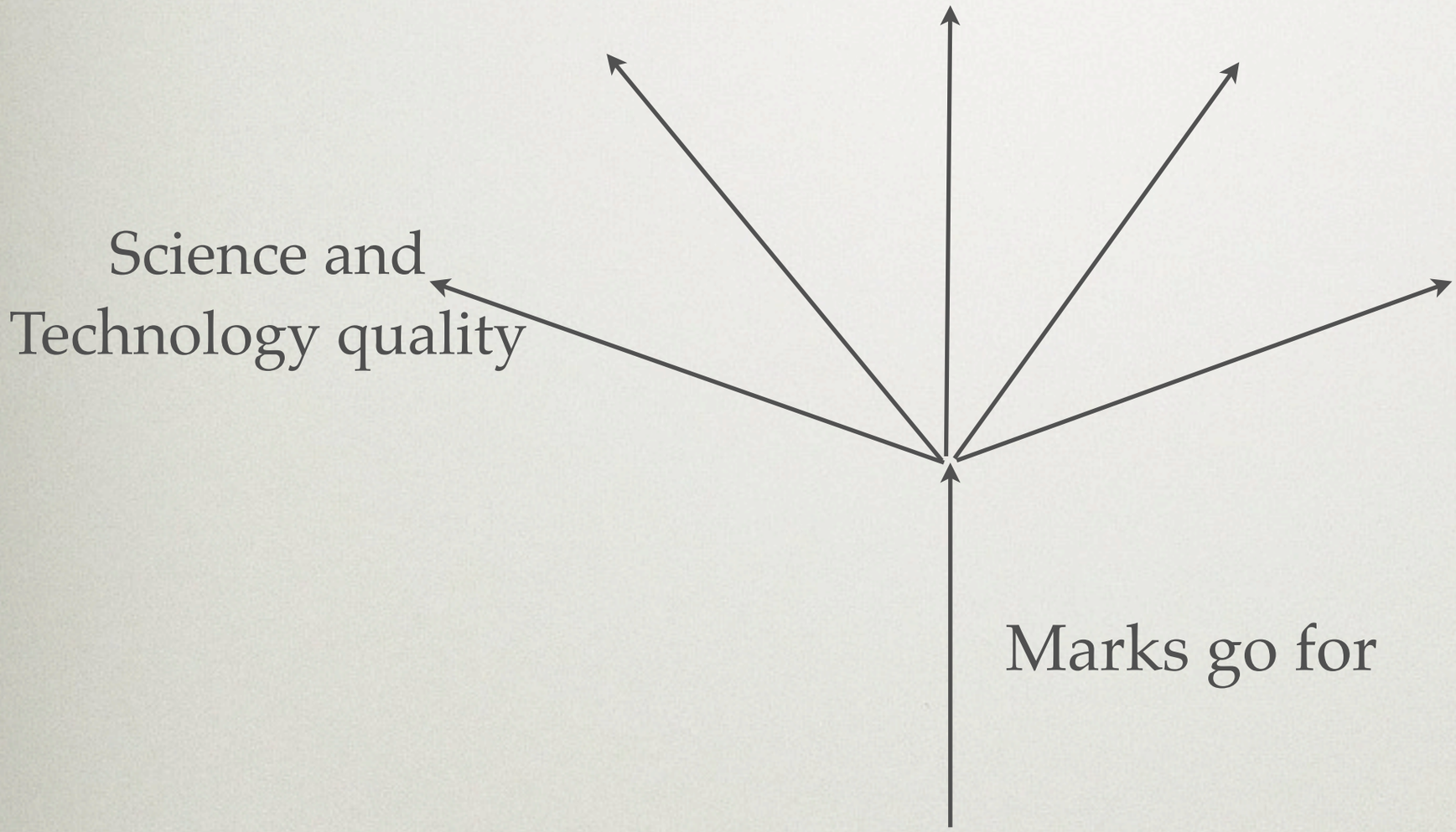
- **Who** is going to read this?: Detail versus clarity.
- What is **unique** about me, what is unique about the host institution?
- How is this going to affect my **future** AND that of the EU?
- This is not a present - how do I sell myself as a **profitable investment**?
- What do **they** want to hear? - very important!

Questions to ask yourself



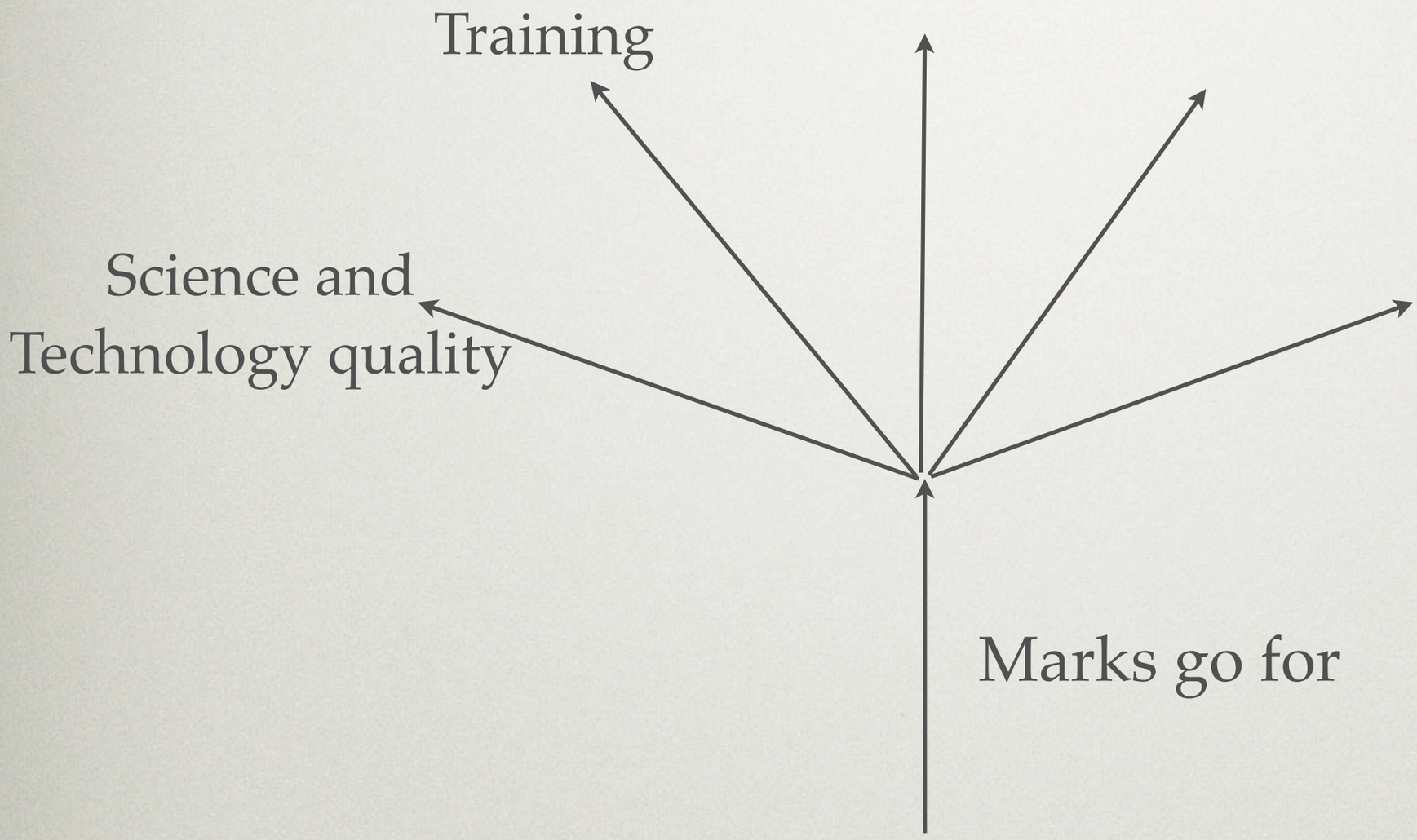
- What do **they** want to hear? - very important!

Questions to ask yourself



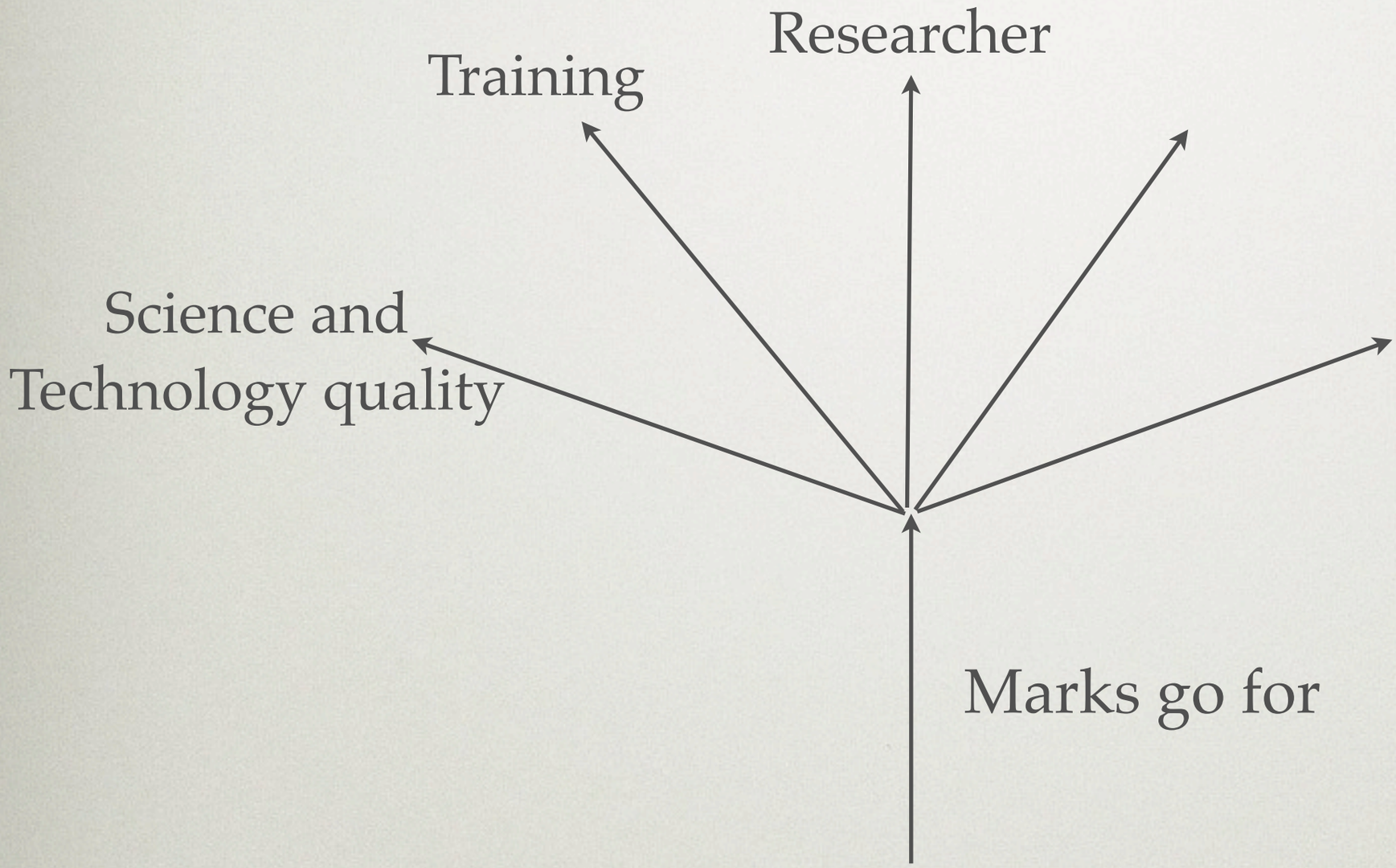
- What do **they** want to hear? - very important!

Questions to ask yourself



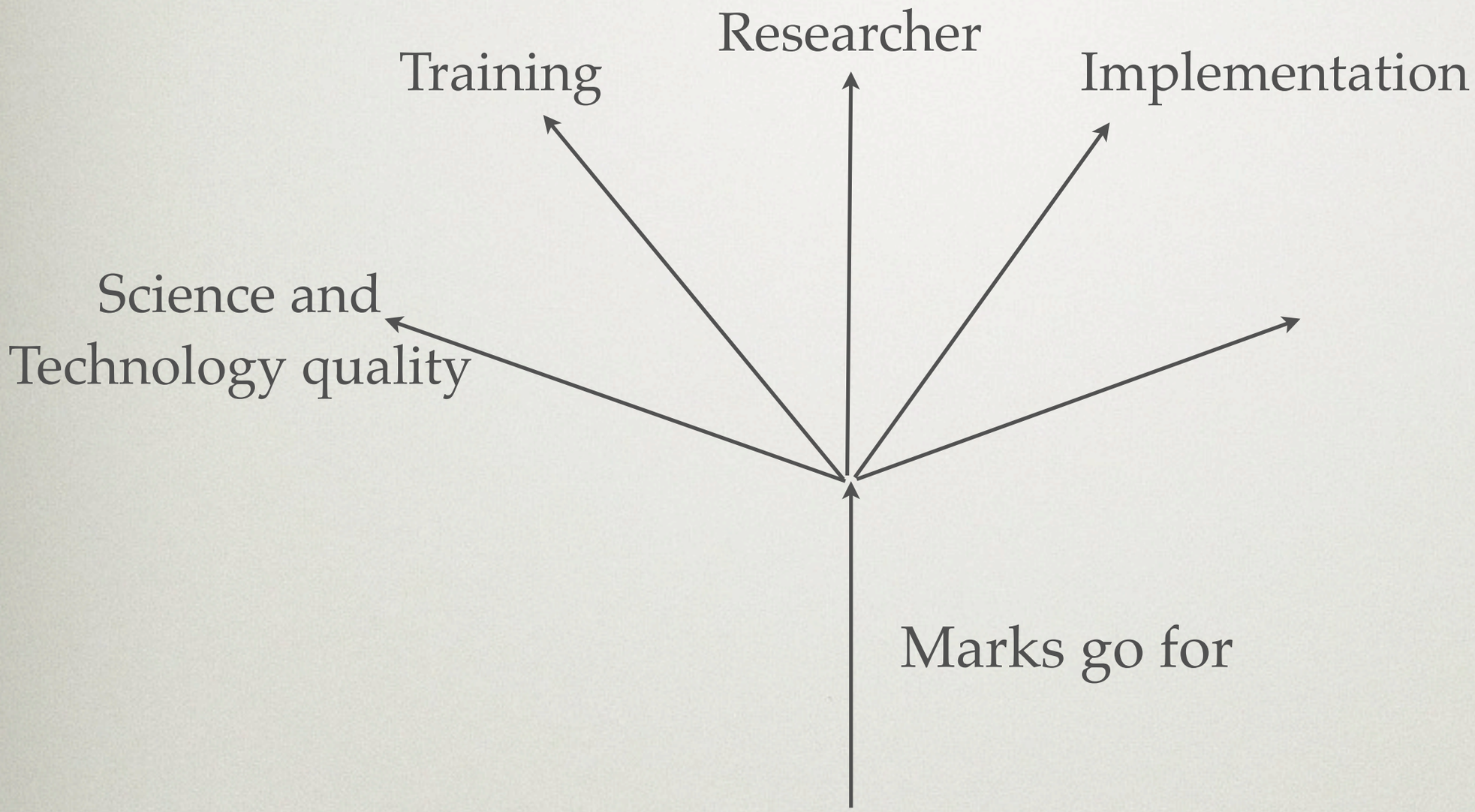
- What do **they** want to hear? - very important!

Questions to ask yourself



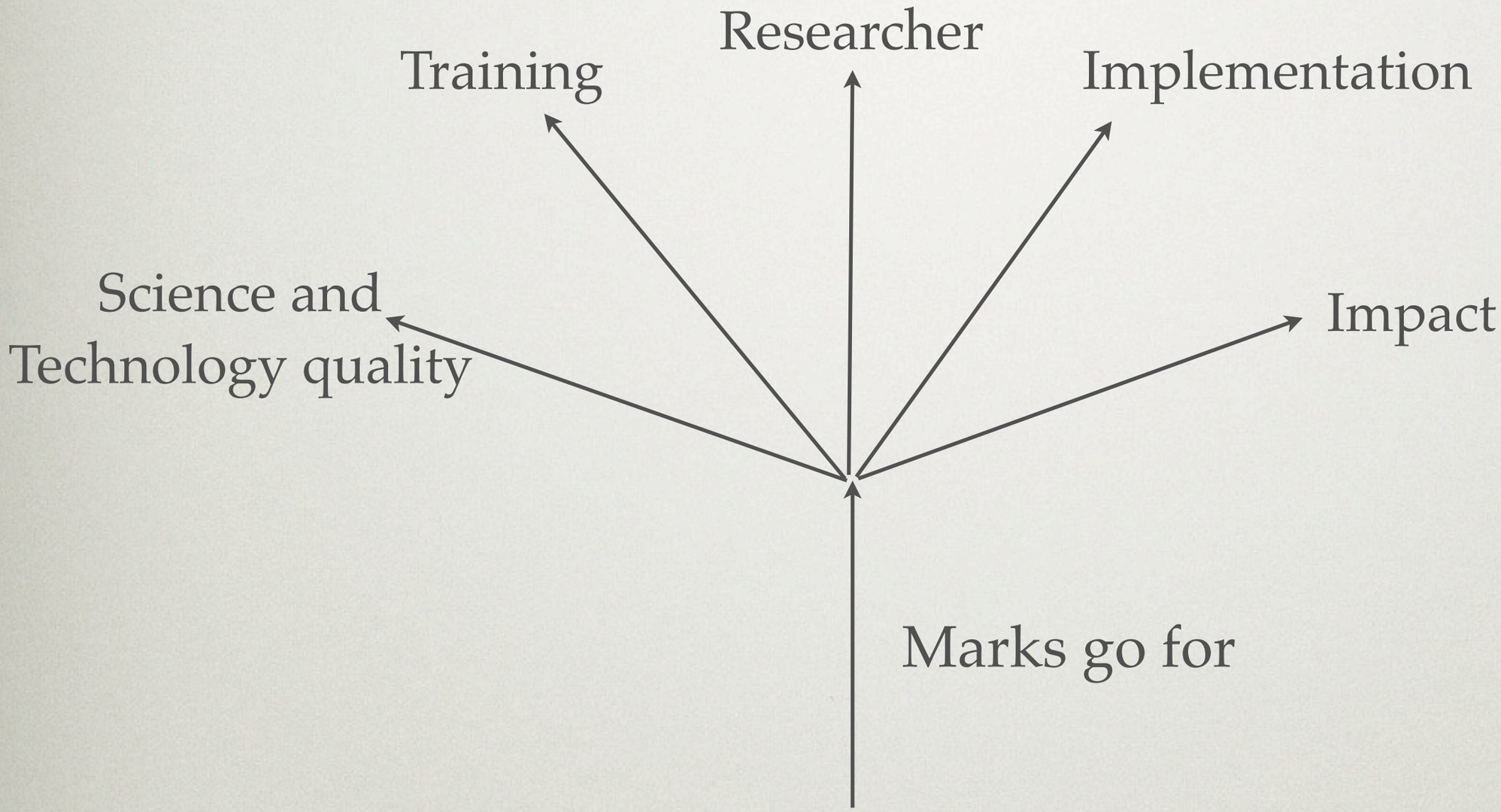
- What do **they** want to hear? - very important!

Questions to ask yourself



- What do **they** want to hear? - very important!

Questions to ask yourself



- What do **they** want to hear? - very important!

Things to emphasise

- Structure - tables and bullet points are good.

Overview of the work plan along with collaborating institutions

First 12 months	Thermalisation in AdS/CFT	MPPMU + Santiago de Compostela
	Back-reacted flavour in finite temperature AdS/CFT	MPPMU + Santiago de Compostela
Second 12 months	Baryons in AdS/CFT	MPPMU + Dublin IAS + Korea CQUEST
	Heavy-light mesons at finite temperature	MPPMU
	Condensed matter applications of AdS/CFT	MPPMU

Things to emphasise

- Structure - tables and bullet points are good.
- Concrete timelines - including half-way goals.

Year 1

The first part will be the study of thermal QCD from the AdS/CFT perspective. This in itself can be split into two parts, each taking around six months to complete.

1-6 months

The first six months will be dedicated to the calculation of thermalisation processes dual to real-time horizon formation. Such an investigation will be computer intensive and the study of the appropriate boundary conditions to model a realistic plasma will take up the first two to three months of this time. Once an appropriate model has been constructed we will then be able to implement this code with difference scenarios, including finite baryon density and external fields. The study of the thermalisation in the full phase space of finite temperature SYM will take up the remaining period of the six months.

- Mid-term milestone: to have a working model of thermalisation, giving realistic timescales of the plasma equilibration.

7-12 months

The second six months will be a joint collaboration between the MPPMU and the University of Santiago de Compostela, the fellow's current host institute, where expertise in geometries with back-reacted flavours is second to none. Here the majority of the work on these methods has been pioneered creating a

Things to emphasise

- Structure - tables and bullet points are good.
- Concrete timelines - including half-way goals.
- Specificity (career training opportunities, etc.)

In summary, the training goals will be:

- An increase in the breadth of expertise of the fellow, possible with the experienced researchers in residence at the MPPMU and the mobility within Europe as collaborations are enlarged. The topics which will most advance the fellow's future prospects will be:
  1) Gauged supergravities
  2) Back-reacting brane geometries
  3) Perturbative string theory and classical supergravity
  4) Object Oriented programming, specifically C++
  5) Black hole physics in the string theory context
- An increase in teaching and people management skills in supervising PhD students. This will be possible not only through supervising students, but also in organizing conferences and meetings on a global platform.
- An emphasis on scientific management for the successful creation of the fellow's own research group in the future, vital not only for the fellow but for the training of future researchers to continue such work within the European union.

Things to emphasise

- Structure - tables and bullet points are good.
- Concrete timelines - including half-way goals.
- Specificity (career training opportunities, etc.)
- Your non-academic side (organisational skills)
-

Things to emphasise

- Structure - tables and bullet points are good.
- Concrete timelines - including half-way goals.
- Specificity (career training opportunities, etc.)
- Your non-academic side (organisational skills)
- International opportunities.

Things to emphasise

- Structure - tables and bullet points are good.
- Concrete timelines - including half-way goals.
- Specificity (career training opportunities, etc.)
- Your non-academic side (organisational skills)
- International opportunities.
- Why you? Why your host? (who gains?)

My personal weaknesses

Small-print: The referees have to talk about the weaknesses in every section

My personal weaknesses

Small-print: The referees have to talk about the weaknesses in every section

- "The project consists of an incoherent sum of intended research topics"

My personal weaknesses

Small-print: The referees have to talk about the weaknesses in every section

- "The project consists of an incoherent sum of intended research topics"
- "Extremely ambitious project goal for 24 months"

My personal weaknesses

Small-print: The referees have to talk about the weaknesses in every section

- "The project consists of an incoherent sum of intended research topics"
- "Extremely ambitious project goal for 24 months"
- "Additional training and complementary skills are insufficient"

My personal weaknesses

Small-print: The referees have to talk about the weaknesses in every section

- "The project consists of an incoherent sum of intended research topics"
- "Extremely ambitious project goal for 24 months"
- "Additional training and complementary skills are insufficient"
- "Hosts expertise not sufficiently elaborated"

My personal strengths

My personal strengths

- "Objectives and methodology clearly stated"

My personal strengths

- “Objectives and methodology clearly stated”
- “emphasis on [...] experimentally verifiable situations”

My personal strengths

- “Objectives and methodology clearly stated”
- “emphasis on [...] experimentally verifiable situations”
- “training goals [...] are clear”

My personal strengths

- “Objectives and methodology clearly stated”
- “emphasis on [...] experimentally verifiable situations”
- “training goals [...] are clear”
- “work plan is very well structured”

Good Luck!