

25 Rules on How to Write a Good Proposal

Karl-Heinz Glaßmeier
TU Braunschweig

This Morning's Programme

My 25 Rules

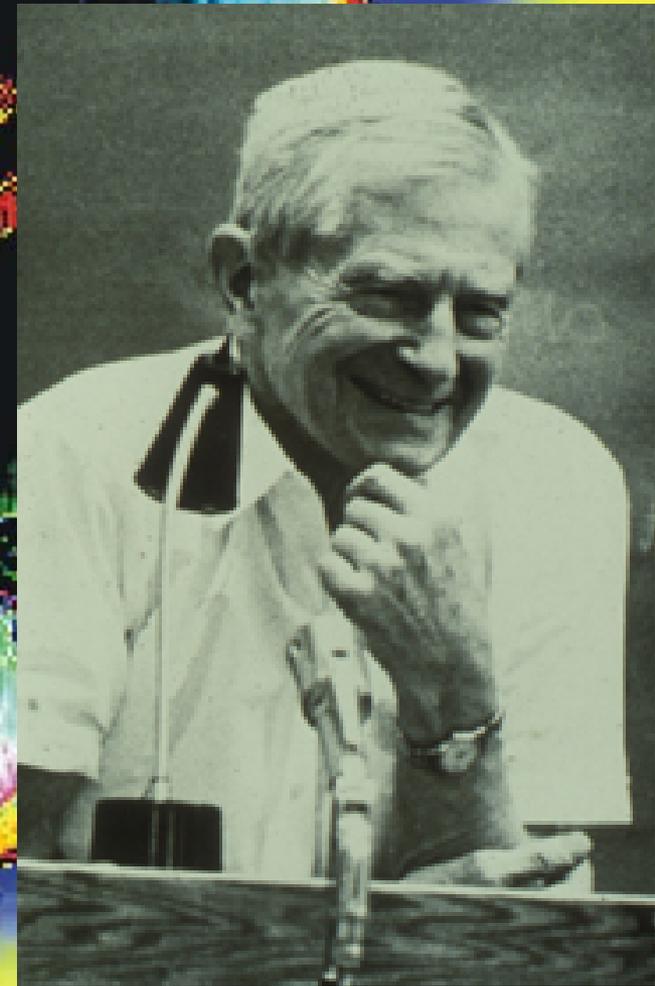
Your first short proposal

Discussion on your proposals

25 Rules on how to Write a Good Proposal

Rule 1:

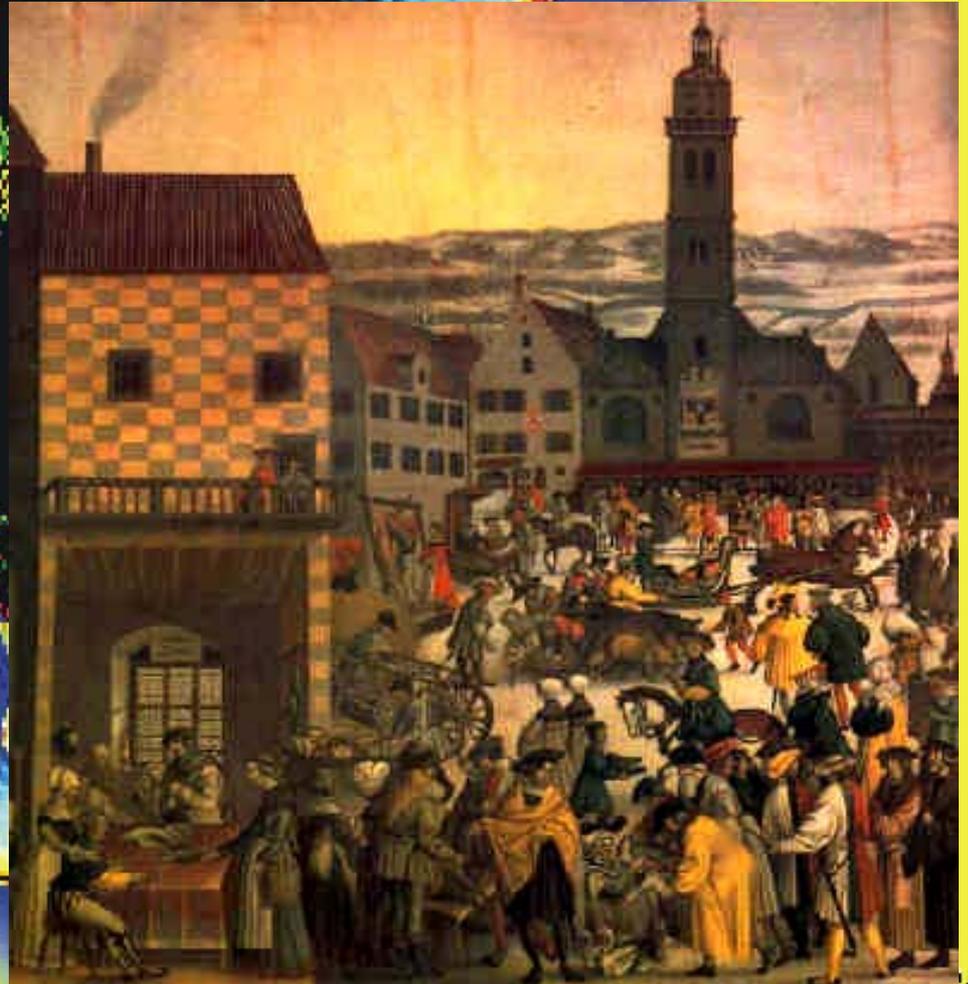
You need to have a good scientific idea or problem to be attacked !



25 Rules on how to Write a Good Proposal

Rule 2:

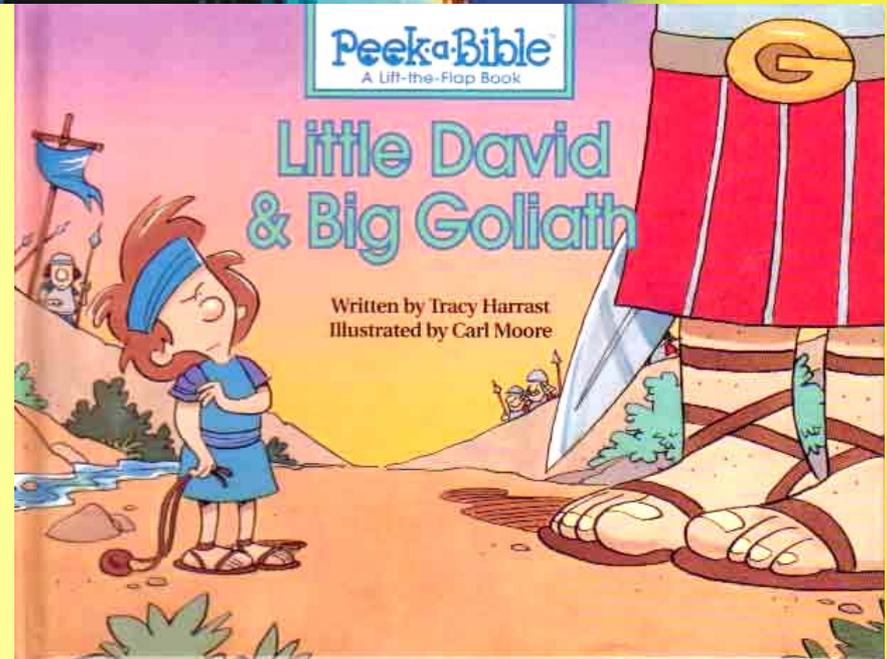
Good or bad idea - that is defined by your peers. Take this into account !



25 Rules on how to Write a Good Proposal

Rule 3:

Before you start to write - make sure that your *mission* fits the *mission* of the funding agency !



Do not become an Anti-David !!!!!

25 Rules on how to Write a Good Proposal

Rule 4:

Be optimistic -
there are many,
many funding
agencies...

DFG

NSF

BMBF

NASA

DLR

DOE

ESF

Humboldt

EU

ESA

25 Rules on how to Write a Good Proposal

Rule 5:

Find others who successfully applied to this agency. Study a sample proposal !

Scaling properties of dynamo models and planetary dynamos.

Proposal to the Deutsche Forschungsgemeinschaft

1. General Information

Proposal in the priority programme

Geomagnetic variations: spatio-temporal structure, processes and effects on system Earth

Continuation of project Ch77/11-2

1.1 Applicant

Ulrich Christensen, Prof. Dr.

Director at the Max-Planck Institute for Aeronomy

Date of birth: 06.05.54, German citizen

Max-Planck-Institute for Aeronomy

Max-Planck-Strasse 2, 37191 Katlenburg-Lindau

Tel: 05556-979-542, Fax: 05556-979-219, Email: christensen@linmpi.mpg.de

Home address: Lange Strasse 92, 37176 Nörten-Hardenberg, Tel: 05503-808809

1.2 Title Scaling properties of dynamo models and planetary dynamos.

1.3 Keyword: dynamo simulation

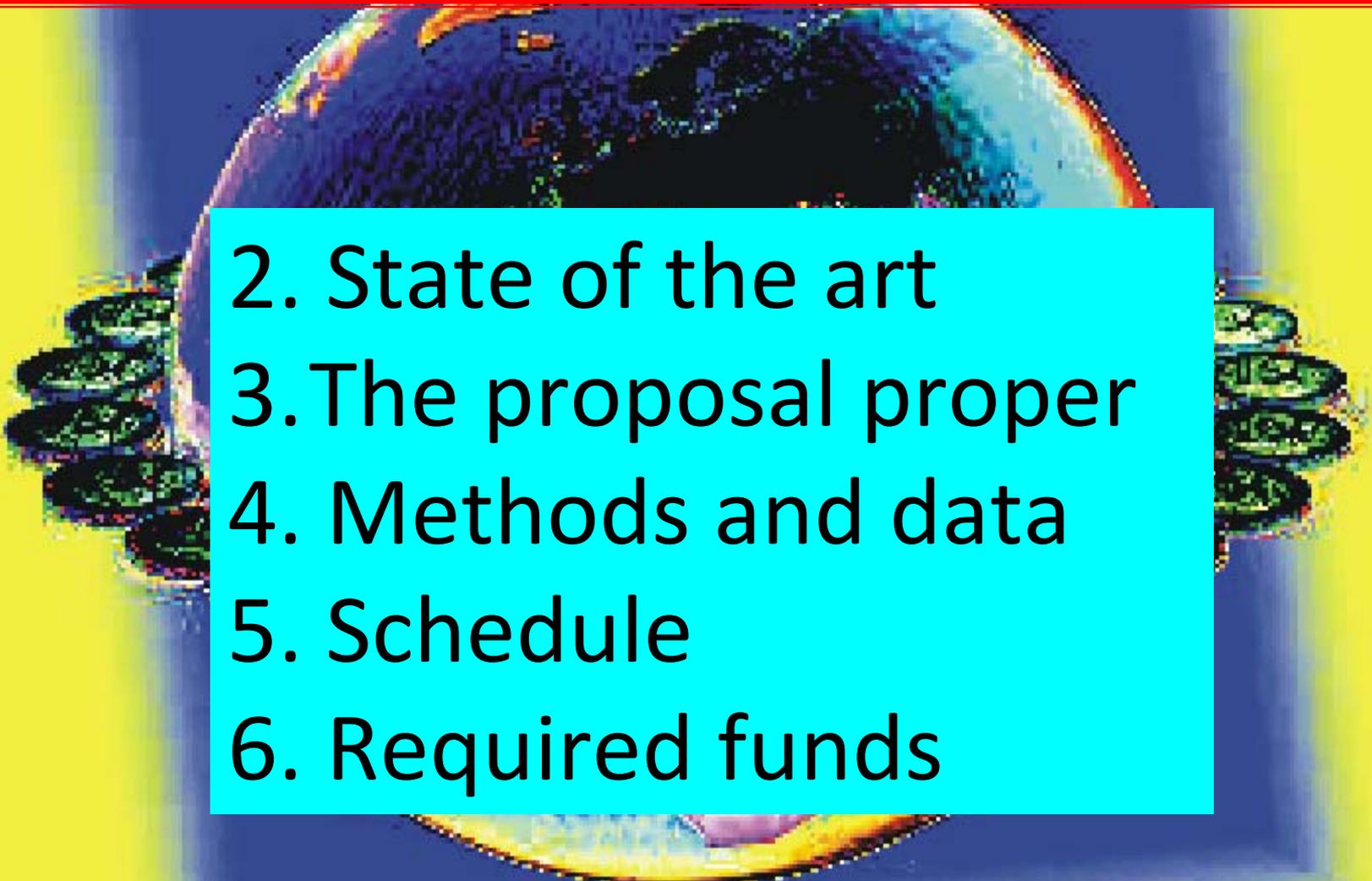
1.4 Research fields: geophysics, geomagnetism, planetary physics

1.5 Planned research period: Two years.

1.6 Period covered by this proposal: support is requested for two years.

1.7 Start of funding period: 01.04.2003

25 Rules on how to Write a Good Proposal

- 
- A hand holding a globe of the Earth, with the hand's fingers visible on the left and right sides. The globe is centered in the background, showing continents and oceans. The hand is rendered in a dark, textured style.
2. State of the art
 3. The proposal proper
 4. Methods and data
 5. Schedule
 6. Required funds

25 Rules on how to Write a Good Proposal

Rule 6:

Funding agency people are only partly administrators - they have scientific experience, contact them with your questions !



25 Rules on how to Write a Good Proposal

Rule 7:

Think about
external and
internal
deadlines !



25 Rules on how to Write a Good Proposal

Rule 8:

The display of the proposal should be attractive. Avoid spelling errors !

No handwritten proposals, but avoid overdoing

25 Rules on how to Write a Good Proposal

Rule 9:

The peer-reviewers are not paid ! And often are from different fields.



25 Rules on how to Write a Good Proposal

Rule 10:

The title of your proposal should be **sexy** !

But do not prostitute yourself !

Study of the interaction of stellar winds with magnetized objects surrounding stars at habitable distances

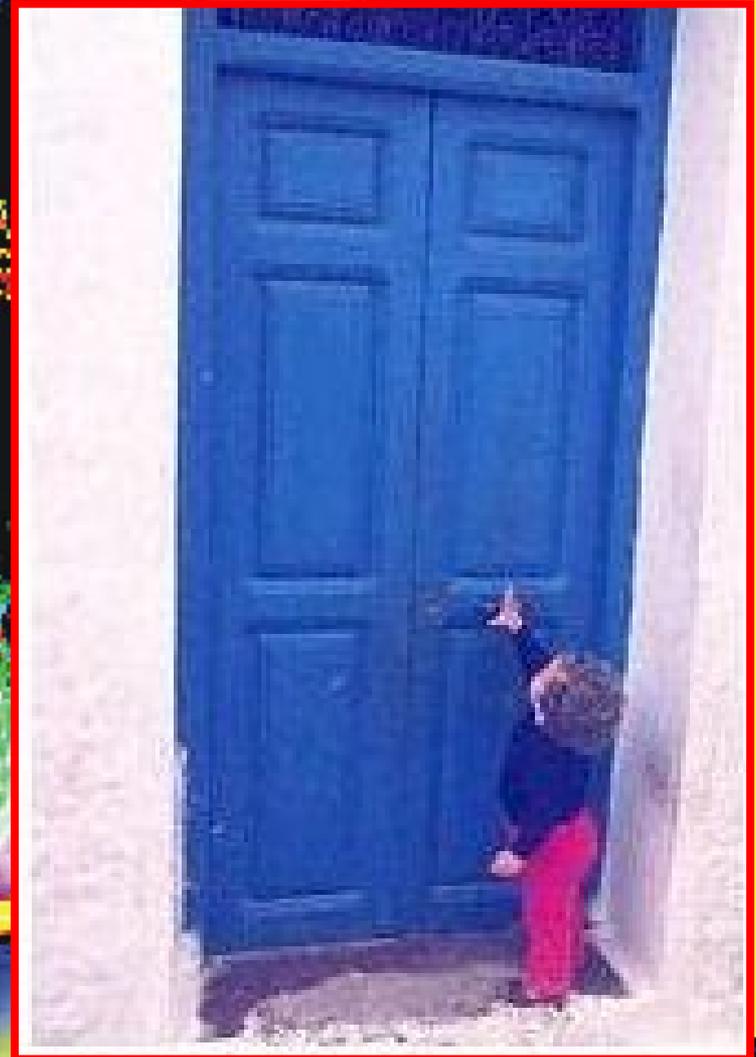
or

Magnetospheres of Extra-Solar Planets

25 Rules on how to Write a Good Proposal

Rule 11:

Follow strictly the rules of the funding agency for the title page etc.



25 Rules on how to Write a Good Proposal

Rule 12:

The abstract is important. It serves as a first, sometimes also final information about the proposal

Sample abstract:

The proposed study aims at collecting statistical information about successful proposals. Details are found in the proposal proper.

25 Rules on how to Write a Good Proposal

Rule 13:

Proposal writing is a very ritualized process.

Scientific hypothesis

Specific aims

Current state of knowledge

Experience of your team

Your pilot studies

Methods and tools to attack
the problem

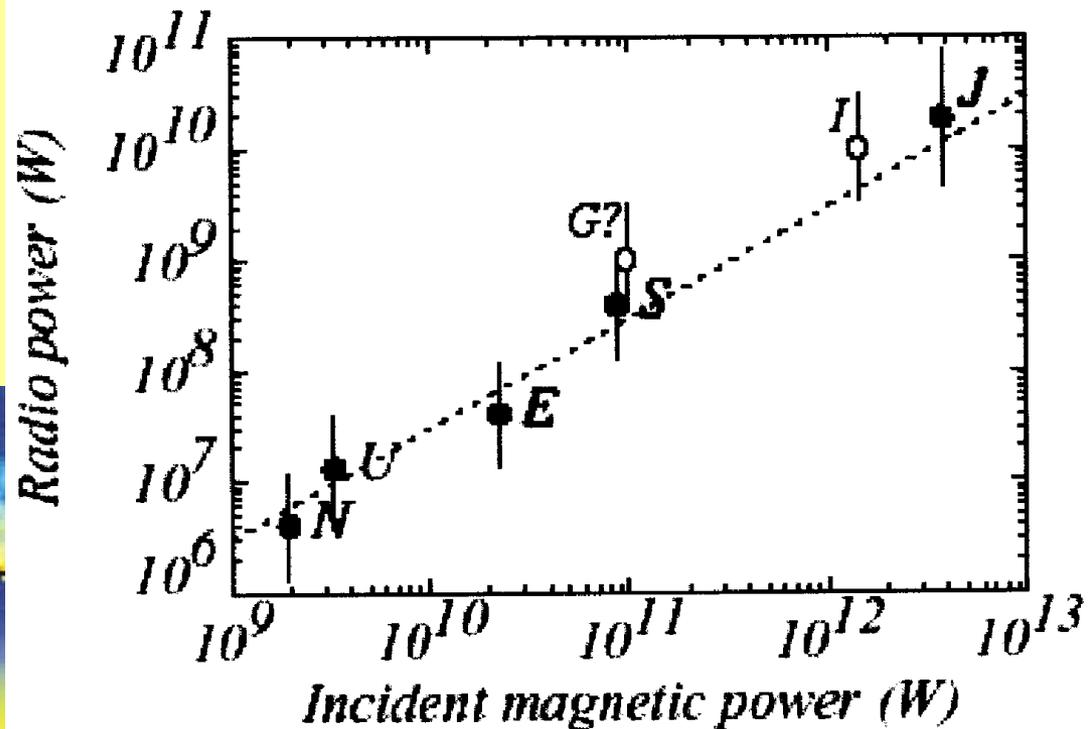
Timetable

Resource level

25 Rules on how to Write a Good Proposal

Rule 14:

Your scientific hypothesis should be testable ! And it should be significant.



25 Rules on how to Write a Good Proposal

Rule 15:

**Specific aims
are important !
You cannot
do everything
at the same
time.**

Extra-solar magnetospheres:

Find scaling laws for magnetospheres

Find scaling laws for planetary magnetic field

Apply laws found to known ESPs

Find scaling laws for radiation

25 Rules on how to Write a Good Proposal

Rule 16:

Current state of knowledge section is very important and critical.

What is known ?

What is not known ?

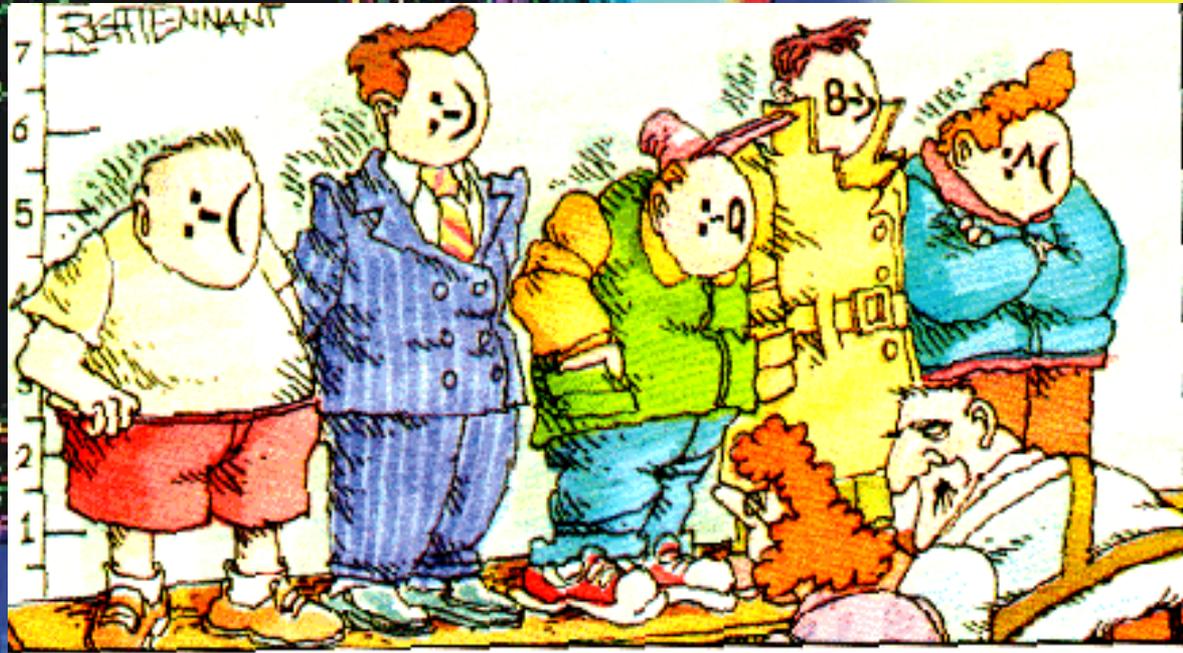
Why is your hypothesis important ?

Give a fair review of previous and competing work. It is a peer-review process!

25 Rules on how to Write a Good Proposal

Rule 17:

**Experience of
your team**



Present your highly skilled team !!!!

25 Rules on how to Write a Good Proposal

Rule 18:

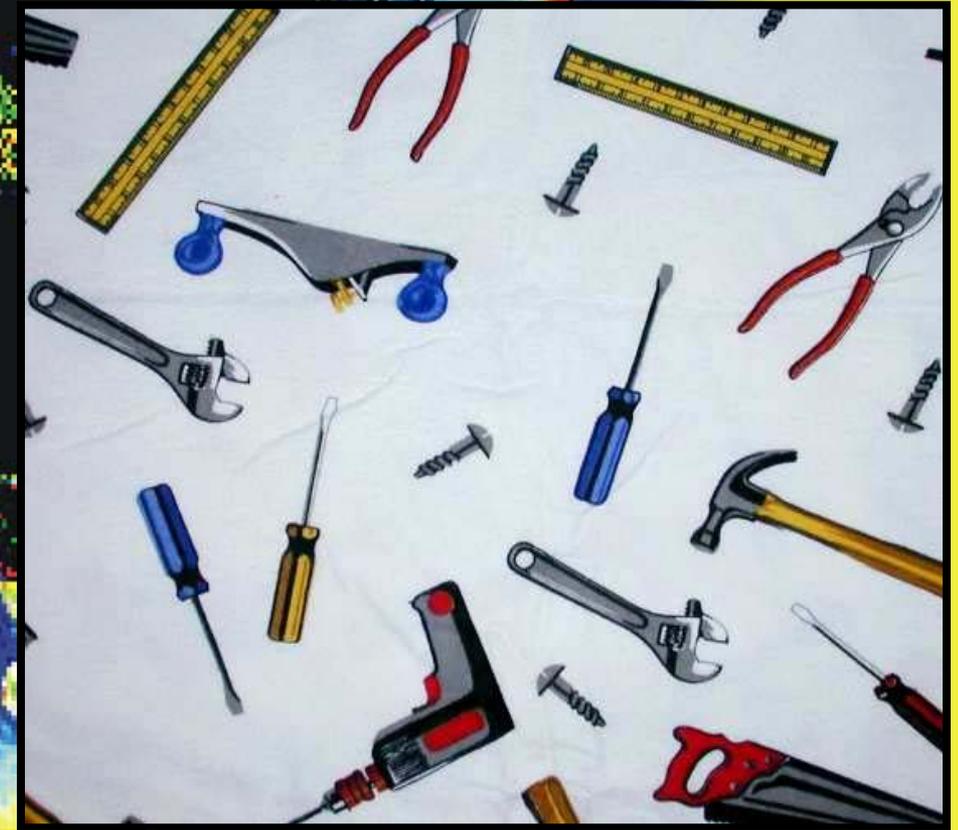
Pilot study results
are very important.

...but some colleagues already did the research they are asking funding for. This is somewhat absurd and non-scientific...

25 Rules on how to Write a Good Proposal

Rule 19:

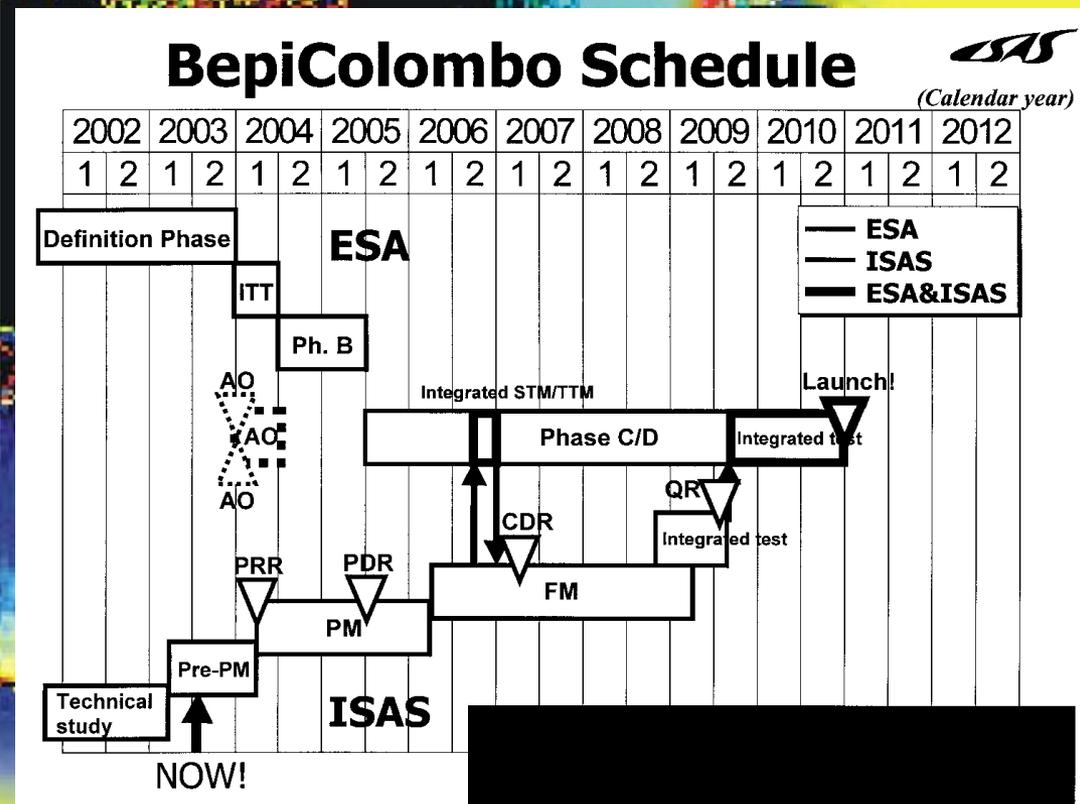
Methods and tools to be used should be described in some detail



25 Rules on how to Write a Good Proposal

Rule 21:

Provide them with a time table and schedule !



25 Rules on how to Write a Good Proposal

Rule 22:

**Ressource level:
be as detailed
as possible !
Add a bit for
the referees to
cancel.**



Example: Resource Level

Personal:	50.000,- /year
Travel:	3.000,- /year
Consumables:	5.000,- /year
Investments:	15.000,- /year
Publication:	1.000,- /year

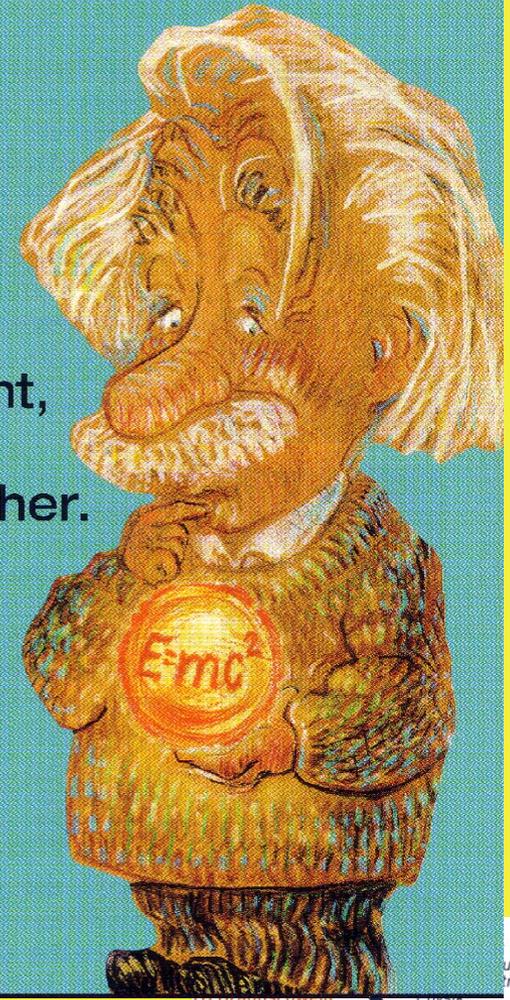
25 Rules on how to Write a Good Proposal

Rule 23:

Only the one
who tries can
win !

Nur wer
nicht sucht,
ist vor
Irrtum sicher.

Albert Einstein



25 Rules on how to Write a Good Proposal

Rule 24:

**If you loose -
keep on trying!**

**Il faut imaginer
Sisyphé heureux**

Albert Camus

25 Rules on how to Write a Good Proposal



Rule 25: If you win, have a party and invite Dieter and me!