# PROPOSAL

# Second Topo-Europe Young Researchers Workshop (YTE2) Creation of collaborative cross-disciplinary proposals

#### Organizing committee<sup>1</sup>

David Fernández-Blanco - VU Amsterdam - VAMP Martin Reiser - Innsbruck University - Source-to-Sink Wolfgang Reiter - University of Bremen - Thermo-Europe Cătălin Trifan - VU Amsterdam - Thermo-Europe

#### Scientific rationale and relevance to the program

The Second Young TOPO-EUROPE Researchers Workshop (YTE2) aims to effectively prepare young researchers of the different TOPO-EUROPE CRP's for writing international scientific proposals. We expect the YTE2 to trigger the potential of the young researchers network to the generation of ideas for large international proposals and activate present and future scientific proposal production.

The YTE1 opened a new array of possibilities for TOPO-EUROPE young researchers. We had effective interaction and active discussions as well as very productive sessions. The sessions on future career paths and on collaborative problem-solving pointed the need to create outstanding scientific proposals for a successful academic career. Since many of us are near the end of our reserach projects and have no expected proposal in the close future, we decided to dedicate most of the session in the last morning of YTE1 to experience the dynamics of proposal formulation. Each one of the four working groups generated one proposal, which was then discussed with the others. This session gave us insight in the process of creation and allowed us to judge and criticize the proposals made by the other teams. We consider that, for the very limited amount of time that we had (a bit more than one hour), reasonably good ideas were formulated. Further work to complete the initiated ideas is needed to produce 'white papers', the foundation for future proposals. Obviously, this is a strong rationale for the YTE2.

One of the most vital activities in an academic career is the ability to obtain funding for research. We realized that, surprisingly, adequate knowledge on funding opportunities and on formulation of scientific proposals was lacking among the skills of the young TOPO-EUROPE scientists. Since many TOPO-EUROPE PhD students are getting close to the completion of their thesis, we consider that this is an ideal time to gain skills on scientific proposals and funding opportunities. Besides, being part of the young scientists of the TOPO-EUROPE research program, we are in an advantageous position to generate international multi-disciplinary proposals. This type of scientific proposals, based on trans-sectional integration of the different research made within Europe, addresses highly relevant scientific questions, which are difficult to approach by single institutions and/or methodologies. These proposals enhance sharing platforms and European-wide collaboration, thus increasing the possibility of successful funding.

<sup>&</sup>lt;sup>1</sup>Note: complete details on the organizing committee are in Appendix I

The main objective of the YTE2 is to (in)form TOPO-EUROPE young researchers on the process of scientific research proposal funding and to formulate the basis of at least one scientific proposal made amongst the participants of the workshop. This will be achieved by the effective lecturing and guidance of proposal writing professionals as well as experienced researchers. This specific know-how is an important development of our academic career and is vital to improve considerably our future employment opportunities.

In the YTE2 we also aim to obtain a deeper consolidation of the network of young scientists created during the YTE1 and previous TOPO-EUROPE workshops. This is probably the last chance to bring the young scientists of TOPO-EUROPE together. It is therefore very important to use this opportunity to strengthen the network and generate a permanent structure to continue the exchange of ideas.

One of the four general goals of the TOPO-EUROPE scientific programme is "to promote the mobility and training of young researchers in the field of topography evolution and its societal relevance" and to "encourage and facilitate scientific cooperation". Therefore, we understand that this workshop will help the young researchers to become highly skilled scientists. We are confindent that the YTE2 is a unique opportunity to use the momentum gained in TOPO-EUROPE and enhance collaboration amongst international teams following a bottom-up approach. The YTE2 will also be relevant in order for the young scientist to play a pro-active role in shaping the TOPO-EUROPE 2020 initiative. Following the lead of the YTE1, the YTE2 workshop clearly goes beyond the individual CRP's of TOPO-EUROPE and lays a foundation for future interaction.

### **Preliminary Schedule**

# 17<sup>th</sup> September

#### 12:00 – 15:30. Arrival and preparation

- 12:00 15:00. Arrival in Schiphol airport, travel to Utrecht and check-in at hotel
- 15:00 15:30. Arrival to Utrecht University and check-in.

#### 15:30- 16:15. Introduction

- 15:30 16:00. Reception, tags, prints, abstracts + coffee/tea
- **16:00 16:15.** Introduction to the YTE2

16:15 - 20:15. Session I - About the art of proposal writing and Europe-wide research projects

- 16:15 18:45. Supervised gathering of potential proposal topics from the participants
- 18:45 19.30. Talk by an academic person about European funding programmes (e.g. ERC)
- 19:30 20:15. Talk by an academic person about Europe-wide projects (e.g. Topo-Europe)

20:30 - 00:00. Ice-breaking events

20:30 - 21:45. Welcoming dinner at hotel
21:45 - 00:00. Icebreaker party

# 18<sup>th</sup> September

09:00 - 11:00. Session II - Introduction about proposal writing

Talk by Prof. Dr. Mischa Bonn

11:00 - 11:30. Coffee/tea break

11:30 – 13:30. Session III - Selection of proposal ideas

Several contributions

- 13:30 15:00. Lunch break
- 15:00 17:00. Session IV Supervised work on the pre-proposals  $\rm I$
- 17:00 17:30. Coffee/tea break
- 17:30 19:30. Session V Supervised work on the pre-proposals II
- 20:00 21:30. Dinner
- 21:30 00:00. Optional Visiting Utrecht

# 19<sup>th</sup> September

- 08:30 10:00. Session VI Presentation and discussion of proposed proposals I Several contributions
- $10:00\,-\,10:30.$  Coffee/tea break
- 10:30 12:00. Session VII Presentation and discussion of proposed proposals II Several contributions
- 12:00 13:30. Lunch break & Concluding remarks

13:30. Finish

### Provisional participants and speakers

#### 1. Participants

The YTE2 is intended for TOPO-EUROPE young researchers, thus every PhD or post-Doc within the TOPO-EUROPE framework is invited to join. We have planned for a maximum of 28 participants from all the CRPs. So far we have few confirmations, most of which are from the young researchers involved in the organization of the YTE1+YTE2.

#### Confirmed participants

Table 1:	Confirmed	participants	and	their	CRP
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Participant	CRP's
Anna Smetanová	Source-to-Sink
Cătălin Trifan	Thermo-Europe
David Fernández-Blanco	VAMP
Flora Bajolet	Crystal2Plate (ITN network)
Martin Reiser	Source-to-Sink
Wolfgang Reiter	Thermo-Europe
Wouter van der Wal	RESEL-GRACE

#### 2. Contributing speakers

- 1. Prof. Dr. Mischa Bonn is invited to give a talk on Funding possibilities and how to write outstanding scientific proposals (confirmed). His contribution will be funded externally.
- 2. Prof. Dr. Sierd Cloetingh is invited to give a talk on European funding roadmap. (contacted)
- 3. Prof. Dr. Peter van der Beek is invited to give a talk on European-wide research proposals. (not yet contacted)

### Justification of external speakers

The first session in the YTE2 is dedicated to the formulation of scientific proposals and Europewide research projects. For this purpose we invite three external speakers that will give lectures on the specifics of these topics. We have planned presentations and Q&A sessions by the following contributors:

- 1. an academic person who has an overview of the European funding roadmap.
- 2. an academic person who has experience with Europe-wide research projects.
- 3. a professional educator on proposal writing, for lecturing and supervision.

Their expertise will surely provide relevant insight into the key concepts for creation of successful international proposals and the present situation on European funding possibilities.

Prof. Dr. Mischa Bonn (FOM-Institute for Atomic and Molecular Physics) was first asked by NWO to do a course on successful proposal writing for the Mosaic program. After being coached by Mischa, the success rate for the group went up from  $\sim 20\%$  to  $\sim 90\%$ . Teaching this type of courses and having experience himself with successfully getting funded, Prof. Dr. Mischa Bonn is an exception. All the people at AMOLF ( $\sim 20$ ) were externally funded.<sup>2</sup>

### Provisional dissemination and exploitation plan

The YTE2 has three main targets:

- 1. Facilitate planning of career paths for young researchers.
- 2. Making young researchers familiar with the process of funding, available funding agencies, potential investors and future career opportunities, with a special focus on proposal creation of international collaboration projects and cross-disciplinary programmes, such as TOPO-EUROPE.
- 3. A specific goal is to produce *at least* one scientific proposal made by the participating young researchers.

#### Concrete deliverables

The first, and probably most important deliverable that we envisage, is the creation of a strengthened network of young TOPO-EUROPE scientists that will facilitate and intensify scientific exchange for future collaborative projects. A first marked step toward this target was made thanks to the YTE1. With the YTE2 we expect to consolidate the network and clearly define a permanent sharing platform.

The second deliverable we foresee is one to several seed documents, source for development of short and mid term scientific multi-disciplinary collaborative proposals. In the YTE2, a large amount of time will be reserved to create ideas to solve specific scientific questions and to develop them into 'white papers'. After discussion and evaluation of the preliminary ideas, the most promising ones will be selected to be further refined and structured into outlines of one or more scientific proposals. Emphasis will be given to take advantage of the unique possibilities offered within the TOPO-EUROPE framework, as a multi-disciplinary trans-European research project. Professional supervision and guidance through the whole process will ensure the quality of the deliverable final result.

The participants of the workshop will gain practical knowledge in the process of proposal writing. The YTE2 encourages the participants to create their own research projects using the framework of TOPO-EUROPE. With the knowledge and tips of the invited speakers and the different scientific backgrounds of the young researchers involved in the YTE2, we expect to ease collaboration in multidisciplinary research projects.

 $<sup>^2 \</sup>rm Note:$  find the short curriculum vitae of Prof. Dr. Mischa Bonn in Appendix II

# YTE2 Budget

# Expected assistance: **31 persons**

- 1) Keynote speaker 1 p.
- 2) Distinguished speakers 2 p.
- 3) Participants 28 p.

# A) Catering and Conference Room Services

Total (€)
4320
862.75
150
5332.75

B) Traveling			
Category	Item	Expenses p. p. (€)	Total (€)
Keynote speaker	Flight + transportation	370	370
Distinguished speakers x1 (non-NL)	Flight + transportation	370	370
Distinguished speakers x1 (NL)	Transportation	45	45
TopoEurope participants x22 (non-NL)	Flight + transportation	370	8140
TopoEurope participants x6 (NL)	Transportation	105	630
Total			9555

C) Accommodation			
Category	Item	Expenses per room per night (€)	Total (€)
Keynote speaker	Single room x1	125.75	125.75
Distinguished speaker	Single room x1	125.75	125.75
TopoEurope participants (not NL)	Double room x11	120.45	2649.90
Total			2901.4

Total Requested Budget	
A+B+C	17789.15
Overhead (10%)	1779
Total	19568 Euro

Co-organizers	Institution	Email	Tlph.	CRP
	Dpt. of Tectonics			
David	Earth & Life Sciences			
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	De Boelelaan 1085-1081HV			
	Amsterdam, The Netherlands			
	Inst. of Geology & Palaeontology			
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Reiser	Innrain 52f, A-6020	Martin		Source-to-Silik
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	Department of Geosciences			
Wolfgang	AG Geodynamics of the Polar Regions			
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Cătălin	Earth & Life Sciences			
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	De Boelelaan 1085-1081HV			
	Amsterdam, The Netherlands			

# **APPENDIX I - ORGANIZING COMMITTEE**

Table 2: Committee members details

## Brief Curriculum vitae of Mischa Bonn

#### 1. Personal details

Prof. dr. Mischa Bonn FOM-Institute for Atomic and Molecular Physics Science Park 104 1098 XG Amsterdam The Netherlands **e-mail:** m.bonn@amolf.nl **phone:** +31-20-7547100 **fax:** +31-20-7547290

Male; born, 25/01/71, Nijmegen (NL), married +1. Nationality: Dutch (NL)

### 2. Education/postdoctoral research

<u>Undergraduate:</u> University of Amsterdam; MSc in Physical Chemistry (highest honors), 10/05/93 *Specialization: Statistical mechanics; dynamics light scattering* <u>Graduate:</u> AMOLF / University of Eindhoven; PhD in Physical Chemistry, 18/12/96. *Advisors: prof. Rutger van Santen, prof. Aart W. Kleyn, Dr. Huib Bakker Research: Ultrafast infrared spectroscopy of zeolite catalysts* <u>Postdoctoral:</u> Fritz Haber (Max Planck) Institut (Wolf/Ertl group), Berlin, Germany, 1997–1999 *Research: Time-resolved spectroscopy of ultrafast surface reactions* <u>Postdoctoral:</u> Columbia University (Heinz group), NY, USA, 1998-2001 (totaling ~4 months). *Research: Time-resolved Terahertz spectroscopy of charge carrier dynamics* 

### 3. Appointments

4/2012-present	Director, Max Planck Institute for Polymer Research, Mainz, Germany.
6/2005–present	Extraordinary Professor (Physics Dept.); University of Amsterdam, Netherlands.
1/2004-1/2012	Group Leader at FOM-Institute for Atomic and Molecular Physics, Amsterdam,
	Netherlands.
1/2003-1/2004	Scientific Advisor at FOM-Institute for Plasma Physics 'Rijnhuizen'
1/2003-9/2009	Associate professor (tenured) at Leiden University (Chemistry Dept.)
8/1999–12/2002	Assistant professor (fixed term) at Leiden University (Chemistry Dept.)

### 4. Publications and presentations:

- **160+** papers in peer-reviewed journals (H-index: **33**): 3 in Science; 3 in Nature Physics/Materials/Chemistry; 13 in J. Am. Chem. Soc.; 18 in Phys. Rev. Lett.; 4 in Nano Lett.; 3 in Angewandte Chemie; 1 in Proc. Nat. Ac. Sc.
- 75+ invited talks at international conferences;
- **50+** invited seminars/colloquia;
- **10+** summer/winter school lectures;
- **10** PhD theses supervised.

## 5. Research Fields:

- Label-free vibrational spectroscopy and microscopy of soft matter and biomolecular systems and water in such systems, including model systems for biological membranes
- Surface dynamics: elucidating mechanism and timescales of molecular motion and energy transfer at surface and interfaces,
- Studies of carrier dynamics in organic semiconducting systems, nanocrystalline semiconductors and other photovoltaic building blocks and systems.

### 6. Selected Prizes and Awards

- Elected as one of 60 'Outstanding Young Scientists' worldwide to attend and contribute to the World Economic Forum, Tianjin, China (2010).
- Gold Medal from the Royal Dutch Chemical Society (2009).
- *Personal Fellowship* ('VICI') from the Netherlands Scientific Organization (NWO) for research: "Biomolecular Dynamics in Membrane Models" finished 1<sup>st</sup> in 2007 national competition (perfect score).
- Elected Member of 'The Young Academy' of the 'Royal Dutch Academy of Arts and Sciences' (KNAW), Amsterdam (2004).
- Personal Fellowship ('Vernieuwingsimpuls') from NWO for research proposal entitled: "Ultrafast Studies of Chemical Reactions at Surfaces". Finished 1<sup>st</sup> in 2003 national competition.
- Other prizes/awards include: Personal fellowship from the Japanese Society for the Promotion of Sciences (JSPS); Fellowship from the 'Royal Dutch Academy of Arts and Sciences' (KNAW); Award winner in the 'Promising young researchers'-contest of the Dutch Physical Society 1997; Marie-Curie Stipend; Alexander von Humboldt-Stipend.

### 7. Outreach and other Academic activities

2011-present	Master class 'Proposal writing for Physicists', FOM, 2/year.
2011	Program Director within National Initiative "Hightech Systems and Materials" Total budget:
	MEu 7.1
2010	Member of the VICI-selection committee for Chemistry
2009	Program Director National Program "Proton Mobility" Total budget: MEu 2.7
2009-2010	Scientific advisor of Alexander Pechtold, chairman of Dutch Democratic Party
2009-2011	Master class 'Proposal writing for junior scientists', NWO The Hague, 4/year.
2009-present	Member, Editorial Advisory Board of 'Surface Science'
2/2009	RIKEN lab review (Japan) – panel member
2007-2008	Elected and re-elected Chair of the Scientific Counsel, FOM-Institute AMOLF
11/2007	'Phosphorus' lecture, aimed at bringing science to a general audience,
	Zaandijk, Netherlands.
2007	Member of the VIDI-selection committee for Physics
2007	Chair of KNAW Academy Colloquium 'TeraHertz Science', Amsterdam.
2006-present	Member, Editorial Board, Progress in Surface Science
2005-present	Co-Founder of 'www.dejongsteakademie.nl', Young Academy-initiative;
	website aimed at bringing 10-14 year olds in contact with science
2005, 2007	Member of NWO 'Mosaic'-advisory committee; coaching minorities in applying for research
	funds.



2nd TOPO-EUROPE Young Researchers Workshop September 17-19, 2012 Utrecht, The Netherlands

# **Final Scientific Report**

# Summary of the activity

The YTE2 was a productive environment for sharing information on potential scientific proposals and to highly improve the needed skills to succeed in funding them. The participants had a very active interaction and the feeling of relevant future possibilities for the group as a whole has started to rise. During the first evening, Prof. Dr. Claudio Faccenna informed us about the state of the art of European-level proposal possibilities for young researchers, with deeper stress into the ERC Starting grant, and showed the relevance of the soon-coming EPOS data sharing platform. Dr. Mélodie Philippon showed us in detail the funding possibilities associated with the Marie Curie Actions, with special focus on the proposal selection procedure for the PEOPLE-IEF Individual Fellowships. The following brainstorm exercise provided a broad comprehension of intentions and goals to achieve by the young researchers network. An important conclusion was that the inclusion of young researchers from outside the TOPOEurope framework (TopoMOD and other projects) provided an even wider view in this issue. During the next day, lecturing and couching by Prof. Dr. Mischa Bonn gave us a precise insight into the process of proposal writing. Mischa Bonn addressed all the key stages of the proposal evaluation, from the committee perspective and pointers/pitfalls of proposal writing to the higher-end side of the process of proposal selection, rebuttals, presentation and personal interview. Also the corrections and feedback on the individual proposals of each participant by the coach have been extremely helpful. The morning of the last day was dedicated to defend the participants' proposals in a committee interview-like environment. In this session, we achieved a deeper understanding of the process and the major factors influencing the committee's selection for final decision on the proposals. This gave us deeper insights into the process of proposal writing and allowed us to judge and criticize the proposals made by the others. After lunch, the interested participants collaborated and brainstormed to produce the main concepts and first version of the COST proposal. More than half of the workshop participants took part in this activity, first in a collaborative work environment in the conference center itself and later in a continued collaboration through internet. As a final result the group delivered a COST proposal by 28<sup>th</sup> September.

# Final program of the activity

# Monday 17<sup>th</sup> September

- 12:00 15:30 Arrival and preparation
- 15:30 16:00 Reception, tags, prints, abstracts + coffee/tea
- 16:00 16:15 Introduction to the YTE2
- 16:15 20:30 Session I About the art of proposal writing and Europe-wide research projects
  16:15 17:45 Talk by Prof. Dr. Claudio Facenna about ITN TOPOMOD and ERC starting grant
  17:45 18:30 Talk by Dr. Mélodie Philippon about the Marie Curie Actions Conference 2012
  18:30 20:30 Brainstrom and feedback session on the potential proposal topics
- 20:30 00:00 Ice-breaking events

# Tuesday 18<sup>th</sup> September

- 09:00 11:00 Session II Proposals: the committee perspective Talk by Prof. Dr. Mischa Bonn
- 11:00 11:30 Coffee/tea break
- 11:30 13:30 Session III Pointers (11) and Pitfalls (12) of proposal writing More talk by Prof. Dr. Mischa Bonn
- 13:30 15:00 Lunch break
- 15:00 17:00 Session IV Supervised work on the pre-proposals
- 17:00 17:30 Coffee/tea break
- 17:30 19:30 Session V Rebuttals and presentation of a research proposal More talk by Prof. Dr. Mischa Bonn
- 20:00 21:30 Dinner and Visit to the Utrecht city.

# Wednesday 19<sup>th</sup> September

08:30 - 10:00 Session VI - Presentation and discussion of proposed proposals - I

Several contributions

- 10:00 10:30 Coffee/tea break
- 10:30 12:00 Session VII Presentation and discussion of proposed proposals II

Several contributions

- 12:00 12:30 Lunch & concluding remarks
- 12:30 18:30 Formulation of the ideas and creation of the first draft of the COST proposal

## Scientific content of the event

The physical .ppt documents of the presentations of Claudio Faccenna and Melodie Philippon are available here (Mischa Bonn's talk is not available to download):

http://www.young-topo-europe.eu/presentations.html

name: YTE2 password: UtrechT\_2012

#### European Funding Road and Collaborative Projects – Prof. Dr. Claudio Faccenna

Prof. Faccenna was invited to give a talk about perspectives and targets for young researchers within the European framework. He also presented the TopoMod project as a successful example for an initial training network, which unifies research and training, as well as industry and academia. Two funding schemes were explained in greater detail: (i) The European Research Grant (ERC) which supports excellence in frontier research through a bottom-up, individual-team, pan-European competition, and (ii) EPOS as a long term integration plan to initiate research infrastructures for solid Earth Science in Europe. The ERC wants to build up a world class science base in Europe, as an essential prerequisite for achieving Europe's long-term ambitions of "smart, sustainable and inclusive growth" by funding individuals which are or will become leaders in their discipline. The criteria for applications are (i) a scientific track record showing a great promise and (ii) an excellent research proposal. In the ERC grants research must be conducted in a public or private EU Member State or Associated Countries research organization. For the evaluation of proposals, scientific excellence is the sole criterion. EPOS on the other hand, is a long-term integration plan that aims to create a single sustainable, permanent and distributed infrastructure which includes monitoring networks, experimental laboratories and databases. At the moment, EPOS is still in its preparatory phase, but the construction and operational phase starts in 2015.

#### Marie Curie Actions Conference 2012 – Dr. Melodie Philippon

Dr. Philippon reported about the Marie Curie Actions Conference in 2012 and potential funding opportunities in Europe. Besides information on EU's Seventh Framework Programme for Research (FP7), Melodie gave an introduction to the structure, goals and future of the Marie Curie fellowship (MC) in the framework of Horizon2020. Funding research in Europe is based on four specific programs, of which the MC is intended to fund individual researchers. The goals of the MC fellowship are to train young scientists, contribute to societal challenges, increase the mobility of young researchers, create attractive employment conditions and attract young students in research careers. Future development of the MC in the Horizon2020 framework aims towards increasing mobility of researchers in Europe and emphasizes on communication and outreach activities. The second part of the presentation consisted of detailed information about the review process and tips to draft outstanding applications to EU calls.

#### **Brainstorm Session First Evening**

This brainstorm session was initially intended to provide a discussion environment to foment the formulation of collaborative interdisciplinary proposals. However, after the previous talks, the final focus changed.

Two important realizations occurred during this brainstorm session that will influence the future of the YTE network. The first was that there is no space for unprecedented and highly innovative groups like ours in the funding scheme of Europe. The original idea of creating collaborative multidisciplinary cross-European proposals in a purely bottom-up fashion (by young researchers for young researchers) is not feasible at present. Limitations are based on the structure of funding schemes, which is not presently adapted for postdocs' proposals other than Individual Fellowships. The second realization is that the best option to maintain and further promote the YTE network is to apply for a COST initiative for networking activities. Thus, redirection of efforts from the collaborative multidisciplinary proposal, called SEALECTED (SEA Level Change and Topography Evolution Dynamics), to the network proposal started to be addressed during this first evening. This session provided a broad comprehension of the intentions and goals to achieve by the young researchers network.

#### How to get your proposal funded – Prof. Dr. Mischa Bonn Course

#### The Committee Perspective

To be able to write a good proposal, it is key to understand the committee's perspective, what is the procedure for evaluating a proposal and what are the general evaluation criteria. Although the composition of the final score consists of three fixed points (quality of researcher, innovative character and scientific impact of the research proposal, and research impact), the criteria remain relatively arbitrary and leave a relevant amount of freedom for the committee members to decide. The committee members are not paid to develop this function, even though the evaluation process involves a weighty work load for them. Thus, an excellent proposal should be easy accessible as well as clear and concisely written to make life as easy as possible for the committee members. The committee wants to create a new star and their challenge is to judge that based on the CV, the proposal and the presentation. So it is important to stand out from the rest and to find the right balance between concrete and ambitious goals.

### Pointers and pitfalls of proposal writing

This session addresses some important points in writing proposals and gives illustrative examples of good and badly written proposals. For a good proposal, it is important to formulate a well-defined question to resolve, which will be the "holy grail" of the proposal. The motivation to find the "holy grail" should be stated in the text as well as an explanation why it is important and why it should be the author of the proposal to resolve this question. The proposal has to convince the reader of the feasibility of the proposed project. A simple, logical and concise structure of the proposal helps the reader to understand, and illustrative figures will have more impact on the reader than textual explanations. It is important to keep in mind that a proposal is not a research paper. The pitfalls were presented as twelve case studies to which possible solutions were shown.

#### Supervised/joint work on the pre-proposal

Two weeks prior to the YTE2 we were contacted by Prof. Bonn, who structured us into five groups. Mischa Bonn asked us then to write a two page proposal and a one page CV, which had to be sent to the three other members in the group. During this session, we split up into those five groups and, with the knowledge of the preceding master class, we discussed and criticized our scientific proposals. Prof. Bonn also evaluated and discussed individually each proposal with their author. The session ended with a summary on the quality of our proposals.

#### Rebuttals and presentation of a research proposal

Prof. Bonn presented one of his own proposals, which was first rejected and later accepted. when accepted, his proposal reached the highest grade possible at the Dutch science foundation (NWO). He explained it from a technical and scientific point of view and discussed it with the participants. The second part of this session dealt with the processes after the evaluation of the proposal. The author of the proposal is given the possibility to answer to comments and criticism uttered by the committee. This process is called "rebuttal". Prof. Bonn explained the proceeding for those rebuttals and gave general advice how to deal with them, as well as some "Do's" and "Don'ts". The rebuttal should address each point of the referee's comments completely in a positive, constructive and brief manner. The applicant should use the rebuttal to re-iterate the key points of his proposal.

#### Presentation and discussion of preliminary proposals

The presentation of the proposal can drastically change the ranking of the proposals by the committee. The presentation itself should be simple and clear, focused and illustrated with simple, unambiguous graphs. Graphs are often better suited to transport the message. Too much text distracts and should be avoided. Prof. Bonn showed the graphs which he asked the participants to prepare for the workshop and discussed them in a plenary session. Besides the presentation itself, a good preparation on possible questions of the committee, appropriated timing and eloquence and passion on the presentation as well as eye contact with the committee members and final handouts delivery are key elements of a good presentation. For the final session, five participants volunteered to present their research proposals, while the rest of the group acted as a committee, to role-play a real proposal presentation. Afterwards the group discussed the general performance of the presentation and Prof. Bonn pointed out some standard questions, likely to arise.

#### Brainstorm Session Last Afternoon/Evening and initiation of the COST Proposal

The participants that were interested in proceeding with further network activities brainstormed and collaborated to produce the COST proposal. More than half of the workshop participants took part in this activity, first in a collaborative work environment in the conference center itself establishing the axioms and developing the first draft of the COST proposal. The strong engagement and enthusiasm of the participants to gain this goal was palpable during this session that continued until the late evening in the conference center. As a final outcome, we created a COST proposal called IMAGES (Integrative Multidisciplinary Approach to the Global Earth System) that we delivered by 28<sup>th</sup> September. The main focus of this IMAGES proposal is to promote and facilitate the multidisciplinary collaboration and networking between young researchers of Earth Sciences in a new European framework (like EPOS, Topo2020, TopoMod). In this prolific context, IMAGES specifically aims at strengthening and expanding our collaborative multidisciplinary network to explore unraveled interactions in the Earth system through a formative think tank. We envisage that IMAGES will be the first platform of highly skilled early career European researchers.

# Assessment of the results and impact of the activity

The Second Young TOPO-EUROPE (YTE2) Workshop provided the perfect continuation on the young networking activities within the TOPO-EUROPE frame. Moreover, the small number of participants in the workshop and its narrow focus favored the following items to stand out:

- The insightful view on the EPOS framework. Understanding this framework and the reorganization of Earth Sciences presently ongoing at the European level helps us to comprehend the global picture and conceive our role in it.

- The realization of the possible future paths for each of us individually and collectively. The YTE2 promoted understanding of the individual possibilities in the short/mid- term and the collective potential for the mid/long term.

- The talks on the roadmap of European research and active discussion led to a reorientation of the network focus. The talks on funding and subsequent discussions among the participants provided a powerful image of our capacities as a network resulting in the next goal, the COST IMAGES Action.

- Getting to know other scientists in a relaxed atmosphere. A network can only be created through various stages of group development of which our workshop was one.

With these items the YTE2 clearly succeed YTE1 in deepening the TOPO-EUROPE young researchers' collaboration and network. Both networking activities (YTE1 & YTE2) set an excellent basis for long-lasting scientific relationships and collaborations.

# Participants and speakers (19 + 3)

Name	Email	TOPO-EUROPE CRP	COUNTRY
Alan Heays	aheays at yahoo.com	-	NL
Andrea Forzoni	a.forzoni at tudelft.nl	NWO project C26A09	NL
Anna Smetanová	smetanovaa at fns.uniba.sk	FromSource2Sink	SK
Catalin Trifan	trifanium at gmail.com	Thermo-Europe	NL
David Fernández-Blanco	d.fernandezblanco at vu.nl	VAMP	NL
Elisa Calignano	e.calignano at uu.nl	TOPOMOD	NL
Evangelos Moulas	evangelos.moulas   at   erdw.ethz.ch	Rhodope	СН
Filippo Schenker	filippo.schenker   at   erdw.ethz.ch	Pelagonia	СН
Gabriele Calzolari	gcalzolari at uniroma3.it	TOPOMOD	IT
Jonas Morgenweg	jonas at few.vu.nl	-	NL
Marina Quintero-Pérez	m.quinteroperez   at   vu.nl	-	NL
Martin Reiser	martin.reiser at uibk.ac.at	FromSource2Sink	AUS
Mélody Philippon	m.m.b.philippon at uu.nl	TOPOMOD	NL
Sara Savi	sara.savi at geo.unibe.ch	SedyMont	СН
Tamas Mikes	mikes at em.uni-frankfurt.de	VAMP	DE
Thomas Wall	t.e.wall at vu.nl	-	NL
Wolfgang Reiter	wreiter at uni-bremen.de	Thermo-Europe	DE
Wouter van der Wal	w.vanderwal at tudelft.nl	RESEL-GRACE	NL
Zurab Chemia	zch at geo.ku.dk	TopoScandiaDeep	DA
Claudio Facenna	<u>faccenna at uniroma3.it</u>	UniRomaTRE, Italy	
Mélody Philippon	M.M.B.Philippon at uu.nl	Utrecht University, The Nethe	rlands
Mischa Bonn	bonn at mpip-mainz.mpg.de	Max Planck Institute for Polyn	ner Research,
		Mainz, Germany	

# Detailed report of Expenditures

	Travel				
name	item		costs	tota	al costs
Chemia Zurab	flight Copenhagen-Amsterdam-Copenhagen	€	313,00		
	train to Copenhagen Airport	€	4,80		
	train from Copenhagen Airport	€	4,80		
	train Amsterdam-Utrecht	€	10,90		
	train Utrecht-Amsterdam	€	11,10		
	daily allowance (meals)	€	21,00		
	total			€	365,60
Faccenna Claudio	flight Rome-Amsterdam-Rome	€	513,71		
	train Rome-Fiumicinno	€	8,00		
	train Amsterdam-Utrecht	€	8,40		
	daily allowance (meals)	€	21,00		
	total			€	551,11
Mikes Tamas	flight Frankfurt-Amsterdam-Frankfurt	€	246,13		
	train Amsterdam-Utrecht	€	8,40		
	bus tickets within Utrecht	€	5,00		
	train Utrecht-Amsterdam	€	8,40		
	taxi Utrecht	€	10,75		
	daily allowance (meals)	€	42,00		
	total			€	320,68
Reiser Martin	flight Munchen-Amsterdam-Munchen	€	287,20		
	train Munchen-Innsbruck	€	27,60		
	train Amsterdam-Utrecht	€	6,20		
	train Utrecht-Amsterdam	€	6,80		
	train Schiphol-Amsterdam-Schiphol	€	8,30		
	bus tickets within Utrecht	€	5,00		
	daily allowance (meals)	€	42,00		
	total			€	383,10
Reiter Wolfgang	flight Bremen-Amsterdam-Bremen	€	244,46		
	train Schiphol-Amsterdam	€	4,30		
	train Amsterdam-Utrecht	€	6,20		
	train Utrecht-Schiphol	€	7,90		
	bus tickets within Utrecht	€	7,50		
	total			€	270,36
Savi Sara	flight Zurich-Amsterdam-Zurich	€	240,19		
	train Bern-Zurich-Bern	€	42,31		
	train Amsterdam-Utrecht-Amsterdam	€	15,70		
	bus tickets within Utrecht	€	2,50		
	daily allowance (meals)	€	21,00		
	total			€	321,70

Smetanova Anna	flight Vienna-Amsterdam-Vienna	€	297,72		
	train Bratislava-Vienna-Bratislava	€	12,00		
	train Schiphol-Utrecht	€	7,90		
	train Utrecht-Schiphol	€	8,40		
	bus tickets within Utrecht	€	2,50		
	total			€	328,52
Trifan Catalin	train Amsterdam-Utrecht x2	€	12,40		
	train Utrecht-Amsterdam x3	€	18,60		
	bus tickets within Utrecht	€	2,50		
	daily allowance (meals)	€	42,00		
	total			€	75,50
	Bolwerk Centrum				
Bolwerk Centrum	rent meeting room			€	862,75
Bolwerk Centrum	catering			€	678,93
Bolwerk Centrum	flip-over			€	80,33
Bolwerk Centrum	drinks and snacks			€	37,12
Bolwerk Centrum	drinks and snacks			€	39,90
	Mitland Hotel				
Accommodation	2 nights			€	2.672,11
	Dinners				
Utrecht	Restaurant Broers			€	360,40
Utrecht	Restaurant II Pozzo			€	585,45
	Total			€	7.933,56
	Administrative				
Utrecht University	Administrative costs	10 %		€	793,36
TOTAL EXPENS	ES YTE2 - UTRECHT		€ 8726	,92	

Applicant Signature:

6

Financial Officer Signature:

date: 30<sup>th</sup> October 2012 date: