Guide for Writing a Short Proposal

Mathematics and ... Call 2016

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About WWTF

The Vienna Science and Technology Fund (WWTF) is the only larger Austrian private non-profit organization established to promote science and research. WWTF started its funding activities in 2003. According to its statutes, WWTF aims to fund excellent scientific research(ers) following the highest international standards in order to promote Vienna as a city of science and research.

WWTF provides substantial funding for larger multi-annual research projects at home institutions located in Vienna ("Project Funding"), as well as striving to attract excellent researchers from abroad to Vienna ("Vienna Research Groups for Young Investigators"). WWTF runs calls resulting in a tough competition for funding with an average success rate of less than 20% (a rate that varies, however, from call to call).

Currently, WWTF runs the following thematic programmes: "Life Sciences" (*2003), "Mathematics and ..." (*2004), "Information and Communication Technology" (*2008), and "Cognitive Sciences" (*2011). The financial resources of WWTF originate from the "*Privatstiftung zur Verwaltung von Anteilsrechten*" from which WWTF receives about seven to nine million € annually.

In addition, WWTF runs the following funding programmes for the City of Vienna: The "University Infrastructure Programme" (*2006) and "Vienna Research Groups for Young Investigators" (*2010).

While the thematic funding programmes are established in close coordination with Viennese RTD policy and initiatives, the review and selection process lies strictly in the hands of international scientists not employed in Austria. The main selection criterion for funding is excellent scientific quality according to the highest international standards. For each call, an appropriate international expert jury is established. Additionally, for each proposal a number of written peer reviews are obtained. In a meeting in Vienna the juries formulate a funding recommendation based on the reviews and on their own expertise. This recommendation is then formally accepted by the WWTF Board of Directors.

The governing body is the WWTF Board of Directors. It is complemented by the WWTF Advisory Board composed of Viennese scientists and representatives from the economy, society and politics. WWTF office manages all funding activities and is the contact point for all applicants.

Important Issues

The **Call Fiche** including contact information of WWTF call managers is available at www.wwtf.at. The formal criteria for a WWTF MA 2016 project include a minimum funding volume of 200.000 € with an upper range of up to 650.000 € and a planned duration of 2-4 years.

The **Principal Investigator (PI)** of a WWTF project must have a Viennese home institution where the project is affiliated. This includes researchers moving to Vienna with a Viennese affiliation and work place in case of funding. Project **partners** outside of Vienna may receive funding of up to 20% of the total funding applied for. Partners outside Vienna are an option; they are neither obligatory nor a formal criterion for acceptance.

For **universities**, WWTF projects are according to §27 of the "Universitätsgesetz 2002"; authorized signatures from the university / scientific institution acting as the home institution are therefore mandatory at the submission stage. In case of funding, the institution will be the formal contract partner with the principal investigator taking full scientific and financial responsibility.

WWTF funding may be used for all project-related costs; however, the main focus should be on funding scientific personnel. Everybody employed in a WWTF-funded project should get a fair contract with a *wage* according to the "Kollektivvertrag" (collective agreement) of the Austrian Universities or – for staff employed at non-university institutions – according to the standards of the Austrian Science Fund (FWF) available online at www.fwf.ac.at/de/projects/personalkostensaetze.html. A *maximum total employment* is set at 100%. The personnel categories are:

- Senior Personnel: highly qualified scientists, usually already in permanent employment
- Post Doc: or equivalent qualification, including Senior Postdocs
- **PhD Student:** or equivalent qualification
- **Diploma Student:** Bachelor or Master students
- Office/Technician: office staff or technical staff (proportional funding only)

The funding by WWTF under this scheme is not intended to cover investment in general infrastructure, however pro rata depreciation rates for the project duration are fundable for **equipment** necessary for the project. WWTF funding also covers **materials** (consumables and small devices up to 1,500 € each), **travelling costs** (incurred for attending project related scientific events and invitations), **publication costs** (including cost for patent filing and open access publication), **workshops / conferences** (costs incurred by own scientific events), and **other project related costs**.

WWTF pays a **maximum of 20% overhead**. Overhead ("indirect costs") is calculated as 20% of the direct costs of the project. The total funding volume is calculated as direct + indirect costs. A separate project account / SAP number for bookkeeping is necessary for each

project and the direct costs must be reported to WWTF. The overhead is paid as a flat rate with no strings attached. Kindly stick to the overhead regulations of the involved institutions.

Compliance with the rules for good scientific practice is mandatory even at the proposal stage.

Funding Criteria

This WWTF call aims to support teams of researchers that strive for **innovative mathematical methods leading to applicable solutions in and together with other disciplines** (a mathematical applicant together with a partner from another discipline or vice versa). Thus, cooperation between researchers from different disciplinary contexts is a formal criterion for funding. The key selection criterion for this call is scientific quality, i.e., both the applicant and the submitted project must be scientifically outstanding. The **innovative aspect** of a project is a major criterion in the review of the proposals. Innovation is expressed through "innermathematical mobility" regarding promising application domains (e.g. computational humanities, energy, traffic, etc.) OR strong methodological extension (e.g. method itself or combining methods). Projects involving truly novel interdisciplinary collaborations will be given clear preference. Further criteria refer to the **ability** and innovativeness of the project **to bridge disciplines** and to its potential **medium-term economic and/or social benefits**.

In order to assess and evaluate the interdisciplinary and innovative nature of the research endeavor, the above points need to be clearly outlined within the proposal.

Evaluation Process

In this call a **two-stage submission process** is used: first a short proposal of a maximum of five pages shall be submitted describing the key objectives and motivation for the proposed work. Second, if the short proposal is successful, the applicants are invited to submit a full proposal. Short proposals may be submitted at any time from the opening of the call until the final closure date (**15-04-2016 2pm**). Full proposals have to be submitted upon invitation by **19-08-2016 2pm**.

Evaluation procedure in detail:

- 1. Formal eligibility check by WWTF: Initially the proposals will be screened for formal eligibility by the WWTF office based on the following criteria: Principal Investigator is affiliated to a Viennese research institution | duly submitted | funding range between 200.000 € and 650.000 € | required signatures | all necessary parts filled in. Proposals that do not meet the key requirements outlined will not be sent for further evaluation to the jury. Applicants deemed ineligible will be informed shortly after the submission deadline.
- **2. Evaluation of short proposals:** If the proposal is not rejected for formal reasons it will be evaluated by the jury. Each proposal will be assessed independently by several panel members based on the following criteria: **Quality** (scientific originality and excellence of the pro-

posed research project), **Innovative character** (which aspects of the proposed project are especially innovative?), **Ability of bridging disciplines** (Which different disciplines will work together and are there any (new) cooperations encouraging new approaches?), **Economic/social relevance** (what are the prospective benefits and when they are to be expected?), **Potential of the applicants** (accomplishments and potential of the applicants to conduct the research). Applicants not successful will be promptly informed about rejections and receive a brief summary of the evaluations of the jury.

- 3. Evaluation of full proposals: If the short proposal is qualified, the applicants are invited to submit a full proposal by 19-08-2016. The objectives of the full proposal must be consistent and in accordance with the successful short proposal, extending it by providing full details about the approach, the specific work plan etc. A guide for writing the full proposal will be provided in due time. The evaluation of full proposals is carried out through a combination of remote assessment and panels of international experts that convene in Vienna. In the latter case, the initial jury is extended by additional renowned scientists. Two jury members are assigned to each proposal which at first undergoes written peer review by at least three international reviewers.
- **4. Jury meeting** in Vienna in December 2016: Most significant step in the assessment. Comprehensive evaluation of all proposals on basis of written peer reviews and the jury's own expertise resulting in a recommendation "to be funded" or "not to be funded" for each proposal.
- **5. Formal funding decision** (confirmation of jury recommendation) by WWTF Board of Directors.

Applicants will receive anonymized full text reviews and a summary of the jury discussion after the formal funding decision.

How to use WWTF's Online Submission System

- 1. Go to https://funding.wwtf.at
- 2. **Register** with your e-mail address and name: password will be sent to you by e-mail. If you submitted in a former call, you can use this login data.
- 3. Log in, choose the call, and create a new proposal.
- 4. **Write a short proposal**: fill in requested information in *online forms* and *upload requested files* (in PDF format). You can access the system multiple times and modify provided information anytime.
- Submit proposal: the submit button becomes active only after all requested information has been filled in and uploaded; after submission no changes are possible anymore.

Note: The submission system closes at 2 pm on the day of the deadline. The short proposal has a size limit of maximum 5 MB. No figures are allowed in this stage.

Required Structure of a WWTF Short Proposal

Applications to WWTF undergo an assessment by international scientists, thus all proposals must be written in **English**. A short proposal should not exceed 5 pages excluding appendix. Please write precisely and to the point!

A short proposal to WWTF comprises ten parts:

- 1. Basic Information
- 2. Project Summary
- 3. Outline of Approach
- 4. Innovative Aspects of the project
- 5. Characterisation of the Approach for Bridging Disciplines
- 6. Economic / Social Relevance of Proposed Research
- 7. Key References
- 8. Principal Investigators
- 9. Affirmations and Authorization
- 10. Appendix

I. Basic Information

This part has to be filled in the online forms in the submission system. It includes the *Title* of the project, *Keywords* and involved *Disciplines*. Furthermore, the **indicative project duration** (between 2 and 4 years) as well as the **indicative budget** (approximate within the range of 200.000-650.000 Euros) has to be stated.

II. Project Summary (max. 1500 characters)

This part must provide a complete project summary. State clearly the research question and the aims of the team as a whole. What are the innovative aspects of your proposal? Innovation is expressed through "inner-mathematical mobility" regarding promising application domains OR strong methodological extension (e.g. method itself or combining methods).

III. Outline of Approach (max. 5000 characters)

What is/are the scientific challenge/s the project wants to address? Provide an outline of the scientific approach and methodology that will be used to reach your objectives. The objectives should be those that you consider achievable within the project.

IV. Innovative Aspects (max. 1500 characters)

Which aspects of the proposed project are especially innovative? How does it differ from the ongoing research activities of each team member?

V. Characterisation of the Approach for Bridging Disciplines (max. 1750 characters)

Which different disciplines are working together within your research project and whether there are any (new) cooperations between different institutions encouraging new approaches? What are the project's underlying rationales and working principles for bridging disciplines?

VI. Economic / Social Relevance of Proposed Research (max. 1000 characters)

Illustrate what the prospective benefits of your project are and when they are to be expected. Also outline what niche your project's results might fill, possibly referring to what the respective market or societal needs are.

VII. Key References (max. 1250 characters)

Cite the most relevant background literature for the proposal (up to ten).

VIII. Principal Investigator

Name and *full contact information* of the **Principal Investigator** (PI) including the home institution where the PI intends to run the project is required. Typically, this information must also be provided for the Co-PI, representing another discipline. However, the PI is the sole responsible person towards WWTF. Furthermore, the names and institutions of the *Core Team* Members must be stated. Altogether, not more than 3 individuals (including the PI) should be stated in this section.

IX. Affirmations and Authorization

Affirmations are the signatures of the core project team members (max. three). Additionally, WWTF requires collecting the signatures of the authorized person(s) of all participating institutions to which the persons signing the "Authorization" are affiliated in case of funding.

Multiple copies might be used for signing. Scanned pages are accepted. **Please upload one PDF containing all the required signatures!**

In the short proposal stage, no hard-copy print-out version is required!

X. Appendix

In the appendix please upload a "Biographical Sketch" (limited to a maximum of **two pages**) for the Principal Investigator, Co-PI if applicable, and core project team members. The "Biographical Sketch" should consist of a 1-page CV and a 1-page List of Publications (limited to a maximum of ten publications).

A Biographical Sketch must contain the following information:

- (i) Higher education including obtained degrees and dates when received
- (ii) Appointments

A list, in reverse chronological order, of all the individual's academic/professional appointments or other work experience.

(iii) Funded projects

A list of up to 3 funded projects with their running time, funding source, funding sum and the role played in each project.

(iv) Other relevant activities/ experience

A list that demonstrates the broader impact of the individual's professional and scholarly activities that focuses on the creation, integration, and transfer of knowledge.

List of Publications:

A list of up to ten peer-reviewed publications published over the last 5 years. **Mark with an asterisk (*) those publications most relevant to the proposed research.**