Project Planning Summary (AA / BMBF)

DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service

Project name

Efficient statistical tools for networks and their applications

Applicant institution

Leipzig University

#	Impact	Success indicators	Information sources/ methods
	Project objectives (outcomes) *What are the specific project objectives? Project objectives refer to the specific use and application of the results (outputs)* *Add further rows to the table to enter further project objectives (outcomes).*	*Which quantitative and qualitative indicators can be used to measure, whether the respective project objectives have been reached?* *Note: Ideally, only one indicator should be listed per project objective (outcome). However, it may be necessary to consider more than one indicator to record results and make statements regarding the achievement of objectives.*	*How can the data be gathered that is required to assess the indicators (information sources, methods if applicable)?*
OC1	Consolidate the relationship between all partner groups	Joint publications, co-supervised/co-mentored Dissertations	Pubmed, Web-of-Science, ArXiv
OC2	New collaboration opportunities will be identified, especially in regard to junior scientist's research network expansion	Grant applications to national funding agencies on research topics developed during cooperation	Web pages of funding organisations
OC3	Development of computationally efficient statistical tools to analyze extensive empirical networks from a spectral distribution as well as a cycle-base angle. publications	Joint publications, co-supervised/co-mentored Dissertations	Pubmed, Web-of-Science, ArXiv
	Results (outputs)	*Which quantitative and qualitative indicators can be used to*	*How can the data be gathered that is required*

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		Which specific results of the measures/activities are envisioned for reaching the project objectives? Add further rows to the table to enter further results (outputs).	*measure, whether the results have been achieved?* *Note:* Ideally, only one indicator should be listed per result (output). However, it may be necessary to consider more than one indicator to record results and make statements regarding the achievement of objectives.	*to assess the indicators (information sources, methods if applicable)?*
OP1		In person meetings in Brazil and Germany will enable all involved scientists to engage in topic specific discussions as well as get firsthand impressions of the work and living environments for future collaborations and research stays.	We plan to organize talks every year and two short courses/workshops to also allow other students and researchers to participate. The PROBAL funding for the partner group has been granted for the current funding period, It is imperative therefore that to extend the DAAD funding to enable the continuation of the successful cooperation.	Minutes of meetings will be reported
OP2		Joint publications will strengthen the scientific footprint for all participating researches, especially young scientists, which will be advantageous for funding applications of their own.	The methods developed here impact several fields of science. Random networks are ubiquitous and helpful to analyze chemical compounds, social interactions, metabolic pathways, neural networks, and the internet. We expect that the works generated in this proposal will have a high impact, given the widespread interest in random networks.	Pubmed, Web-of-Science, ArXiv
OP3		Junior scientists will develop a set of skills, from collaborative software development via open source platforms like GitHub to planning skills for software and project development as well as distribution and maintenance of open source software.	All developed algorithms will be implemented as reference software packages e.g. in R or Python libraries.	GitHub, CRAN, PiP, Conda
OP4		Junior scientists will be tightly integrated in both, report composition as well as new applications for DAAD or other funding, thus providing them with hands-on experience in funding acquisition and project execution.	Towards the end of the funding periods of DAAD and PROBAL, we will apply for further funding by DAAD or other funding agencies for follow-up projects.	Follow-up applications

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#	Title of the measures / activities	Impact	Impact
	Measures/activities[1] *List the intended measures/activities (use the title of the measure/activity used in the project description)* *Insert new rows in the table for further planned measures/activities.*	*Please assign the measures/activities to the de-sired project results (***outputs***) by entering the corresponding number in this column (OP1, OP2, etc.)*	*Please assign the measures/activities to the desired project objectives (***outcomes***) by entering the corre-sponding number in this column (OC1, OC2, etc.)*
M/A1	First visit in Germany	OP1, OP3	OC1, OC2
M/A2	First visit in Brazil	OP1, OP2, OP3	OC1, OC2
M/A3	Second visit in Germany	OP1, OP2, OP3, OP4	OC1, OC2, OC3
M/A4	Second visit in Brazil	OP1, OP2, OP3, OP4	OC1, OC2, OC3

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[1] A measure/activity can be presented on its own or as part of a group; e.g. 'five events', provided that these contribute to the same project objective (outcome).