Leibniz Competition: Strategic Goals, Research Assessment and Monitoring

December 2023



Preliminaries

• This set of slides is aimed at all scientists and science officers in Leibniz institutions. It is intended to provide an initial overview of the internal competition procedures in the Leibniz Association, in terms of their objectives and funding opportunities, but also with a view to creating the greatest possible transparency of the selection procedures themselves and including a cross-year overview.

A PowerPoint version of the slides is available upon request (please contact saw@leibniz-gemeinschaft.de)



Overview

- **1. The Leibniz Association**
- 2. Leibniz Competition:
 - 2.1 Objectives/ Evaluation criteria
 - 2.2 Eligibility and funding
 - 2.3 Review process/ Assessment
 - 2.4 Transparency and fairness
- **3. Additional information**





The Leibniz Association at a glance

- Founded in 1995
- An association of 96 independent institutes, including 17 infrastructure facilities and 8 research museums
- Financial volume € 2 billion (2021) by Joint
 Science Conference
- Around 21,000 employees, including 12,000 scientists
- Evaluation every 7 years
- Strong regional roots in every German federal state



The Leibniz Association covers a broad range of scientific fields

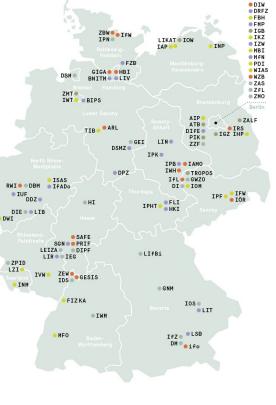
Section A — Humanities and Educational Research (23 institutions)

Section B — Economics, Social Sciences, Spatial Research (18 institutions)

Section C — Life Sciences (24 institutions)

Section D — Mathematics, Natural Sciences and Engineering (23 institutions)

Section E — Environmental Research (8 institutions)



Leibniz Gemeinschaf

The Leibniz Mission

Collaborative research

Scientific excellence and social relevance

- Knowledge-based and applied research
- Interdisciplinary collaborative research
- Close collaboration with universities
- Wide range of research infrastructure facilities, eight research museums



Why a Competition within the Leibniz-Association?

- incentive of internal competition and cooperation
- to achieve the Leibniz Association's strategic objectives
- to stimulate the Leibniz Association's continued profile development
- since 2005 as part of the Pact for Research and Innovation



Funding Programmes within the Leibniz Competition

- Leibniz Junior Research Groups
- Leibniz Programme for Women Professors
- Leibniz Collaborative Excellence
- Leibniz Transfer

- Leibniz ScienceCampi
- Leibniz Research Alliances



Strategic priorities of the four Open Topic Funding Programmes



Junior Research Groups

- Promoting young talents
- Attracting the best minds
- Internationalization



Women Professors

- Attracting the best minds
- More women in scientific leadership positions
- Internalisation



Collaborative Excellence

- Promotion of collaboration within Leibniz and between Leibniz institutes and their networks
- Optional: high risk high gain



Transfer

 Strengthening the transfer into politics, society and the economy



Leibniz Junior Research Groups

Programme document

Objectives

Gain outstanding scientists from Germany and abroad

Promote young scientists

Offer early independence

Evaluation Criteria

The candidate's...

- Academic performance (publications and funding obtained from third parties)
- Career status and future career prospects
- Scientific independence and integration into the institute's research landscape
- International research experience

The project's ...

- Academic and methodological quality
- Originality and level of innovation
- Maturity and relevance



Leibniz Programme for Women Professors

Programme document

Objectives Promote outstandingly talented women and their innovation potential

Increase percentage of women in leadership positions

Strengthen strategic collaboration with universities

Evaluation Criteria

- The candidate's academic profile and career prospects
- Scientific excellence
- Structural impact
- Status of the joint appointment



Leibniz Collaborative Excellence

Programme document

Objectives

Highly innovative research

Strategic collaboration within the Leibniz Association and the greater scientific community

Optional: high risk – high gain

Consolidating already established Leibniz topics as well as development of new fields of research

Evaluation Criteria

- Scientific excellence and innovativeness
- For high risk high gain: expected scientific breakthrough or fundamentally new perspective
- Quality of the network
- Synergies in the collaboration and added value through networking
- The topic's relevance
- Strategic and structural impact



Leibniz Transfer



Evaluation Criteria

- Innovativeness and relevance
- Prospects of success and feasibility
- Target groups and efficacy
- Sustainability
- Assessment of the project leaders
- Added value for the Leibniz Association



Structural aspects relevant for all Programmes

Concept for research data management Dissemination of results: Open Access Publications are expected; costs can be reimbursed Equality Standards and Diversity Career Development

Good Scientific Practice

Leibniz Guidelines:

Handling of Research DataOpen Access Policy of the LeibnizAssociationCareer DevelopmentGood Scientific PracticeEquality standardsStandards for the appointments to
academic management positions

Eligibility and funding

- In total **25 million € p.a.** available
- Every Leibniz Institute can submit applications
- 1 or 2 applications per institute as lead applicant (up to 1 million € total)*
- An application for the Programme for Women Professors can be **added** twice a year

*A non-lead Leibniz Institute can contribute a share of its own application budget (this is called budget partnership) in the sense of co-financing in order to underline the importance of the cooperation. The lower limit for this is 200,000 EUR. A budget partnership relieves the application budget of the lead institute and enables it to submit further applications. You can find more information about budget partnerships in our <u>FAQs</u>.



How to apply

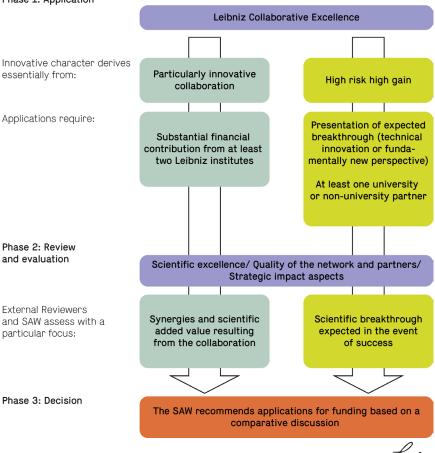
- Application rounds start with the submission of an expression of interest (30 September for the first round of the Leibniz Programme for Women Professors, 30 March for all other programmes including the second round of the Leibniz Programme for Women Professors).
- Full applications are submitted by 30 October (first round of the Leibniz Programme for Women Professors) and 30 April (all other programmes including the second round of the Leibniz Programme for Women Professors)
- Applications are submitted via an electronic application system. Access is given to scientific institute directors who can then invite other persons to create their own accounts and edit or submit expressions of interest and full applications.
- The detailed project proposal follows a defined structure and should not exceed a total length of 12 pages (excluding title page and bibliography). Proposal templates are available on our <u>website</u>.



Phase 1: Application

How to apply

- Applications in the Programme Leibniz
 Collaborative Excellence fall into one of two categories:
- high risk high gain (the expected breakthrough or fundamentally new perspective have to be presented in the application)
- Projects where the innovative character derives mainly from the collaboration
- The latter require substantial financial contribution from at least two Leibniz institutes



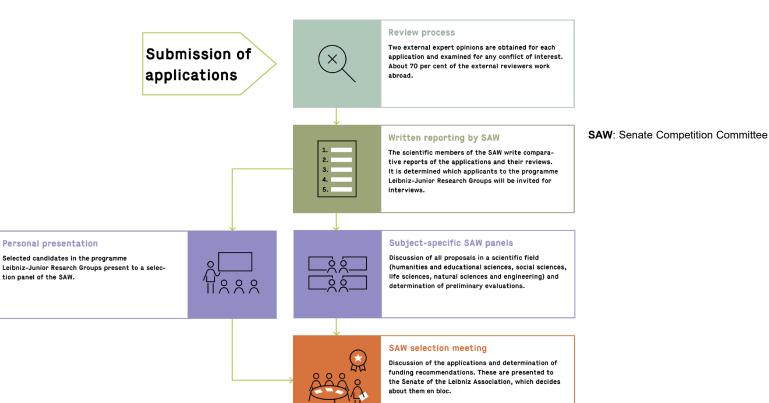


Research Assessment in the Leibniz-Competition

- Defined programmes, structured proposals, specific evaluation criteria
- **Peer review**: written assessment by two external experts and two rapporteurs per proposal
- Discussion in panel and plenary sessions of the Senate Competition
 Committee (SAW)
- **Committee Care and Culture**: Nominations, briefings, feedback rounds, conversation culture and confidence/trust



The four levels of quality assurance in the review process





Important procedural features



Personal presentation of selected applicants to Leibniz Junior Research Groups

A one-day selection meeting to assess the prospects of success and leadership potential

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Additional deadline in the Leibniz Women Professors Program

Since 2020, applications can be submitted twice a year



Focus on qualitative assessment:

Narrative CVs

Highlight 5-10 most important publications

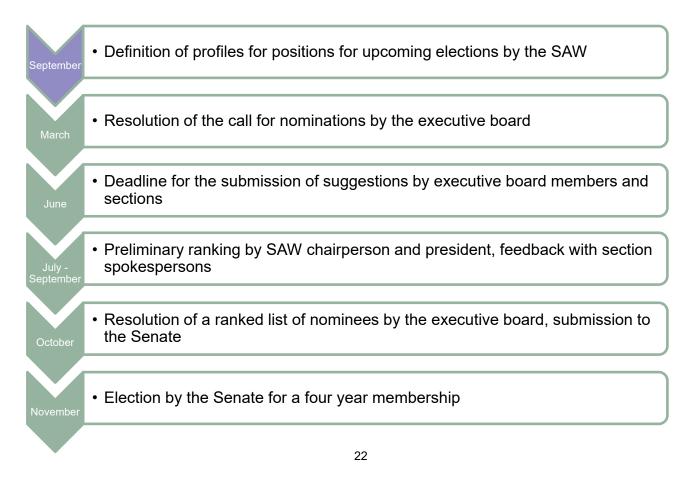


Who assesses?: Members of Senate Competition Committee (SAW)

- The head of the SAW is Matthias Beller, Vice President of the Leibniz Association, deputy is Barbara Sturm, Vice President of the Leibniz Association.
- The <u>members of the SAW</u> are: external scientists, members of the Leibniz Senate and section spokespersons, representatives of the DFG, the GWK office, the German Council of Science and Humanities, and the federal and state governments.
- Since 2020, there are twenty-two full members as external scientists, who are elected by the senate based on suggestions of the five sections and the members of the executive board.



Election of External Scientists to the SAW



Denomination of SAW positions for External Scientists

Modern and Contemporary History History and Culture of Eastern Europe Psychology Linguistics and Digital Humanities Educational Sciences and Educational Research	Social Sciences Human Geography and Regional Sciences Economics/ Microeconomics Economics/ Macroeconomics
Infectiology/ Immunology Epidemiology, Prevention and Public Health Zoology, Evolutionary Biology and Neuroscience Microbiology/ Biochemistry/ Drugs Molecular Cell Biology	New Materials/ Chemistry Physics, experimental Physics, theoretical Materials Science and Engineering
Geo-, Environmental and Agricultural Sciences Environment and global Ecological Systems Biodiversity Research	Computer Science and Research Data Management Humanities and educational sciences Social Sciences Life Sciences Natural and Engineering Sciences Environmental Sciences

Who assesses?: External scientists in the Senate Competition **Committee (SAW)**

Humanities and Educational Research **Social Sciences Life Sciences Natural and Engineering Sciences Environmental Sciences**



Gemeinscha

* Membership of Prof. Stefan Trautmann will be starting 1 April 2024

Transparency and fairness of the procedure

Fundamentals of the process

- Programme documents including evaluation criteria
- <u>GO-SAW</u> (rules of procedure)
- Annually updated selection procedure paper



Feedback to applicants and institutions

- Anonymized reviews
 - SAW statements to the respective application
- Brief description of the selection procedure



Communication

- Annual <u>report</u> available online
- Overview of funded projects on the website
- Feedback round with section spokespersons and external scientists in the SAW



Monitoring

- Distribution of budget among funding programmes
- Chances of success according to e.g.:

Scientific field

Gender

Institution size



Success rates vary from year to year depending on the quality of proposals

Competition 2024	Competitions 2021-2023
24	30
44	26
27	27
31	36
31	30
Humanities and Educational Research	ces Average Success Rate
Social Sciences Natural ar	nd Engineering Sciences

Success Rates are depicted as percentage of the overall requested budget per Scientific Field. Values

are means, error bars are standard deviations.



Success rates according to programmes

Success rates vary from year to year depending on the quality of proposals. There is an open competition between programmes.

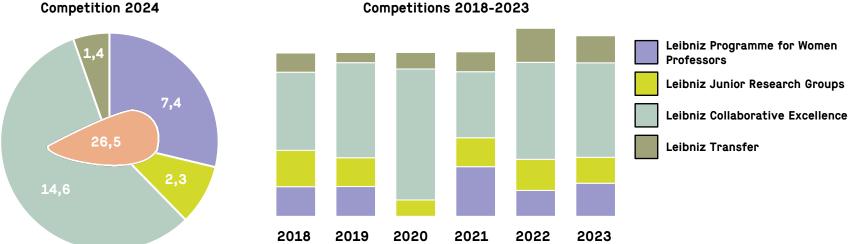


Success Rates are depicted as percentage of the overall requested budget per Programme. Values are means, error bars are standard deviations.



Budget allocation between programmes

Most of the budget is allocated to the programme Leibniz Collaborative Excellence, reflecting the high number of proposals



Competitions 2018-2023

Budgets are depicted as million €.



Interdisciplinary proposals

Around a third of all proposals is interdisciplinary

- The SAW is particularly well-suited for assessing interdisciplinary applications due to its structure: As all scientific fields of the Leibniz Association are represented in the SAW, the proposals can be assessed from two perspectives that are subject-related.
- The funding rates of these applications are comparable to the rates for non-interdisciplinary proposals (almost 30% funding rate, data from Leibniz Competition 2021-2024)
- Interdisciplinary applications are submitted in all programmes and from all sections

Definition

A project in the Leibniz Competition is classified as interdisciplinary if:

a. at least two scientific fields are selected by the applicants

OR

b. two SAW members with different expertise can be assigned in a subject-related manner



Collaborations between Leibniz institutes

Collaborations in 52 active projects within Leibniz Collaborative Excellence (44) and Leibniz Transfer (8) ∇

V	
DI ZFL GWZO IDS	Section A
IFZ DIE DIW IFL	Section B
IRS ZZF IFZ HI	Section C
SGN IZW MFN LIB	Section D
TROPOS DSMZ IUF FZB	Section E
5 Groups of four	✓Lead institute
∇	
IPN LEIZA DM DBM DS	SM GNM MFN SGN LIB DIE IWM LIFBI

1 larger group

- Most of the projects involving collaboration of Leibniz institutes are organized in tandems or groups of three.
- There are collaborations within one section or across different sections.

Active projects as per 31 December 2023



 ∇

DIPF LIFBI

DSM IWM

IOS los IAMO

ZZF GEI

нві GESIS

GWZO

IWH DIW

IWM GESIS

ZEW SAFE

DIW WZB

FZB DRFZ

FMP DRFZ

IPB DSMZ

IPF FLI

DIFE FLI

LIN FMP

SGN LIB

LIN LIR

IPB DWI

WIAS FBH

DWI INM

ATB INP

LIN ISAS

FBH PDI

SGN IOW TROPOS ІРК ZALF ZALF IGB

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IEG IFL

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PIK

DSMZ

INM

IWT

ΙКΖ

IKZ

IPB

Participation and success of women scientists

Leibniz Competition	2018	2019	2020	2021	2022	2023
Percentage of Women						
as Applicants in the Leibniz Competition	36 %	35 %	26 %	40 %	45 %	56 %
without Women Professors	30 %	31 %	24 %	33 %	41 %	50 %
in Scientific Leadership Positions*	31 %	31 %	32 %	32 %	32 %	33 %
as project leaders in the Leibniz Competition	50 %	39 %	26 %	50 %	34 %	48 %
without Women Professors	44 %	27 %	26 %	30 %	24 %	38 %

* Percentage of women in Scientific Leadership Positions in the Leibniz Association: aggregated data from all management levels, data was obtained for the "Bericht zum Stand der Umsetzung des Pakts für Forschung und Innovation 2022".



Participation of Leibniz institutes

Leibniz Competition	2019	2020	2021	2022	2023	2024
Eligible Leibniz institutes*	94	96	97	97	98	98
Participation rate (%)			01	01		
as lead institutes	90	80	82	87	83	78
Participation rate (%)						
incl. non-lead institutes	94	85	90	89	84	90

* Note that the German Institute for Economic Research (DIW) and the Socio-Economic Panel (SOEP) are counted as two Institutions in the Leibniz Competition.

Participation rate incl. non-lead institutes also defines an institute as participating if it is an institutional collaboration partner in at least one application.

Additional information and contact



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Website | Programme Documents | Application Procedure | Templates | Selection Process

Funded Projects

