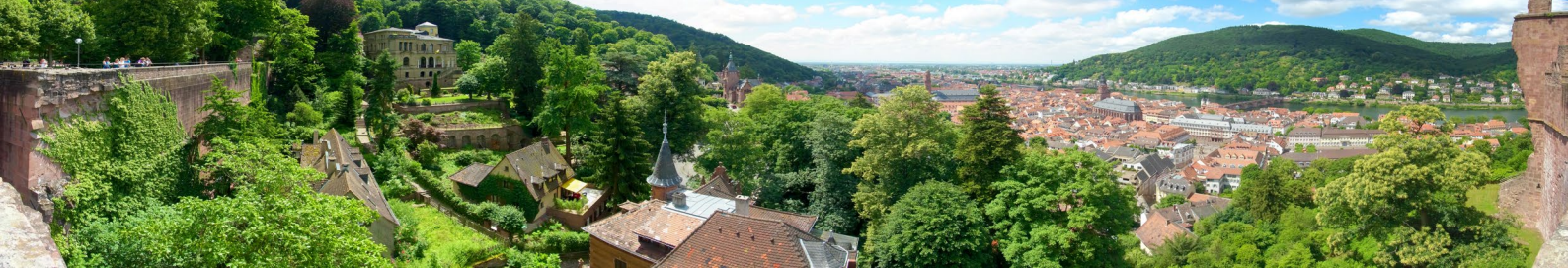


SECOND CIRCULAR AND CALL FOR CONTRIBUTIONS Feb. 2025

Dear members of the DBG, section Biodiversity & Evolutionary Biology

It is a great pleasure to invite and welcome you to our 2025 **section meeting in Heidelberg**. The meeting will take place from August 27th to 30th 2025 at Heidelberg University.

Founded in 1386, Ruperto Carola is the oldest university in today's Germany and one of Europe's leading research institutions and since its foundation Heidelberg University has brought forth many persons of renown – as researchers, teachers and graduates. The Faculty of Biosciences at Heidelberg University is one of the most attractive faculties for life science in Europe in terms of research and teaching. It covers a broad spectrum of research areas from molecular biosciences to biodiversity. Research questions are addressed with the help of all conceivable experimental and computer-based methods from structural biology to systems biology.

Botanical science has a long tradition in Heidelberg and founded in 1593, the Botanic Garden Heidelberg is among the oldest botanic gardens in the world. Major scientific works by Heidelberg botanists are inextricably linked to the garden, and its research and conservation collections are renowned around the world. To this can be added an herbarium harboring 350.000 specimens.

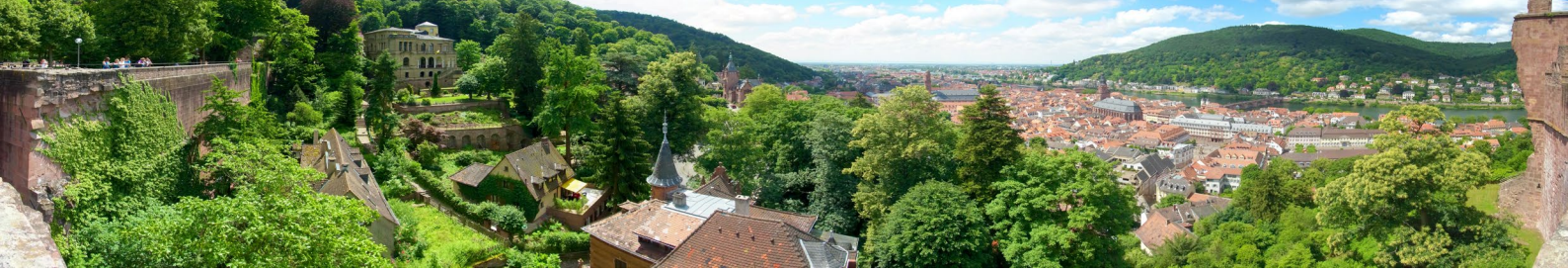
"**Frontiers in Plant Systematics and Evolution**" is the topic of our meeting and participants will have ample room and possibilities to meet their colleagues to discuss the broad spectrum of plant evolution, techniques and concepts, theories and prospects of applied and basic research. Nevertheless, there will be time for social interaction and extensive networking opportunities for graduate students, postdocs, established scientists, and others. The biannual meeting of the Section Biodiversity & Evolutionary Biology of DBG will bring our members together and we hope that we all will explore current frontiers in plant systematics and evolution.

The meeting itself is structured by **plenary/public talks** (Herbert Hurka, Osnabrück; Kirsten Bomblies, ETH Zurich, Yvonne Willi, Basel) and **five thematic symposia** (open call):

Symposia:

1. From populations to species (Hörandl/Gemeinholzer)
2. Plant reticulate evolution at different evolutionary scales (Oberprieler/Wagner)
3. Progress in plant systematics and taxonomy (Kadereit/NN)
4. Plant life at its environmental limits (Bechteler/Koch/Quandt)
5. Miscellaneous (Walden/Kiefer)

We are now asking for registration (deadline: 31.07.2025) and submission of contributions (talks and/or poster; deadline: 31.05.2025). The program [https://backend.cos.uni-heidelberg.de/de/media/12831/download] comprises **four** thematic symposia and one symposium open to miscellaneous topics to be arrenged later.



Symposium I:

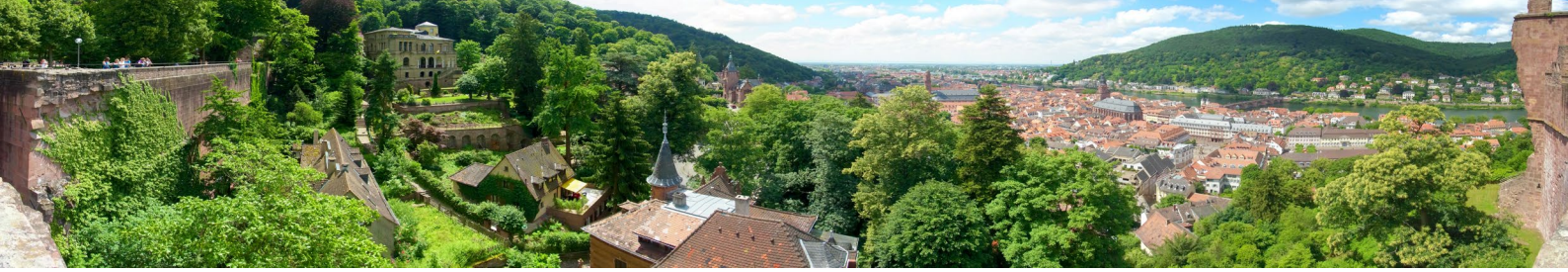
Populations are the starting point for all evolutionary processes. Population dynamics are relevant for microevolutionary processes (diversification, extinction, phylogeographical patterns) and ecological niche differentiation. Population genetics and genomics is further relevant for modern conservation strategies. The field has made great advances due to population genomic studies using next generation sequencing technologies and novel bioinformatic pipelines. We welcome contributions to population and speciation analyses, to population dynamics with different plant reproduction systems (outcrossing, selfing, apomixis), phylogeographical studies, and ecological genetic studies on plants. Methodical contributions to these topics are also welcome. **The symposium will comprise an introduction, one short keynote and five submitted talks**. Posters are also welcome.

Symposium II:

The ubiquity and innovative potential of reticulate evolutionary processes are considered being undeniable arguments for inclusion of these processes into an updated paradigm of evolutionary biology that explains the emergence of organismal diversity besides the classical model of ever-ongoing divergence. The here proposed symposium aims at paying tribute to evolutionary reticulations in the plant kingdom at three different levels: (a) ultra-deep reticulations (symbiosis, endosymbiosis, and inter-clade horizontal DNA transfer), (b) deep reticulations (reticulate phylogenetics and phylogenomics, polyploidy and diploidization), and (c) shallow reticulations (adaptive and introgressive hybridization, homoploid and polyploid hybrid speciation). We are looking ahead to contributions in plant reticulate evolution with both organismically and methodologically innovative perspectives. **The symposium will comprise an introduction and up to six submitted talks**. Posters are also welcome.

Symposium III:

Omics tools and AI are complementing and transforming our traditional approaches used in systematics and taxonomy to enhance species discovery, improve naming and classification of taxa and provide a deeper understanding of the phylogenetic tree-network of life. At the same time, the value of collections as a data and material resource has increased enormously and provides – in combination with new analytical tools – the basis for innovative research ideas. In this symposium, we welcome contribution that harness omics approaches in biodiversity, systematics and taxonomic research. **The symposium will comprise an introduction, one short keynote and five submitted talks.** Posters are also welcome.



Symposium IV:

Plants inhabit nearly all possible areas on earth and have adapted to various environmental factors during their evolutionary history. The conquest of land by plants set the baseline for the plethora of today's land plant diversity ranging from bryophytes to seed plants. Some of these are highly specialized taxa in – for our human point of view – highly extreme habitats. Examples range from xerophytes that live in dry habitats such as deserts or salt marches to hydrophytes that are adapted to habitats with excessive water content. These plants face various environmental stressors such as arid to hyper-arid conditions, high salinity, high UV radiation, a deficiency of oxygen and/or high diurnal or seasonal temperature extremes. The symposium aims to bring researchers together focusing on plants that strive in such extreme environments. **The symposium will comprise an introduction and up to six submitted talks**. Posters are also welcome.

The registration and abstract submission portal for oral and poster contributions is now open at https://web.cos.uni-heidelberg.de/dbg2025reg/

The registration deadline is end of **July 2025**. Please keep in mind that abstract submission deadline is **May 31st 2025**!

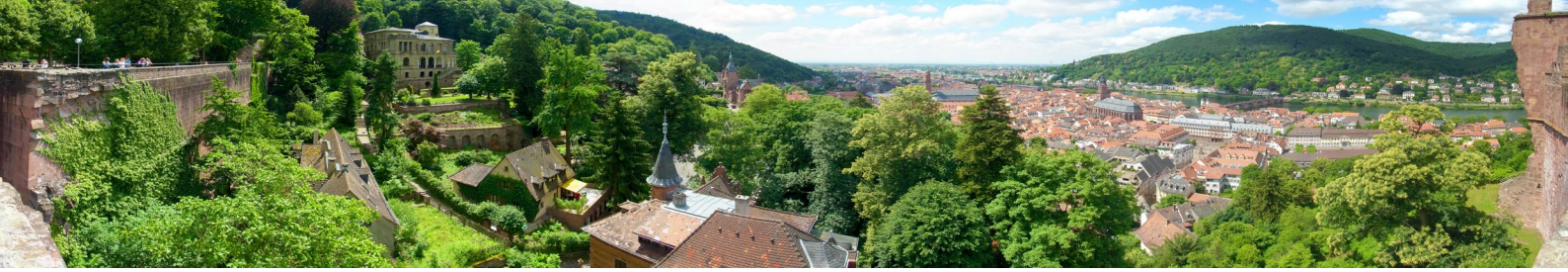
By submission of your **abstract by latest end of May 2025** (max. 100 words), you can should indicate to which symposium your poster or talk (**13 min. slots**) should contribute. Open topics will be also possible tob e covered by symposium V. Of course, as in previous years we expect to receive more abstracts for talks than we can present, and we have to shift talks to posters. Consequently, there is not only ample room for a general poster presentation with opportunities for intensive discussion, but in addition there will be the possibility for a 1-slide poster short talk (90-120 seconds). If you would like to choose this option to be selected and granted this additional option, please indicate this at the end of your submitted poster abstract with: ###interested in flash talk contribution###. Poster size is strictly restricted to porträt DIN A0.

The space is limited to c. 150 participants to allow and we may have to fill these places on a first come/first serve base when registration is open in February 2025. We are planning to close registration latest end of July 2025.

You may find soon further information on: https://www.cos.uni-heidelberg.de/de/DBG_Sektionstagung2025 on travel, accommodation, and location of the conference venue. Please book by yourself, organizers will not arrange travel or accommodation.

We kept the fees constant: Students (Bachelor/Master/PhD) 50 € (Members of DBG 30 €)/normal participants 100 € (Members of DBG 80 €).

The venue is the large lecture hall at the Centre for Organsimal Studies (COS), Heidelberg University, Im Neuenheimer Feld 230, 69120 Heidelberg (**coordinates 49.41802, 8.67403**).



Car parking is difficult in the area and on campus. However, parking garages are available in 5-15 minutes walking distance (max. rate per day c 10-20 €). The venue is easy to reach via public transport. It is also recommended to arrange accomodation early, because Heidelberg is pretty well booked during the summer.

Public transport is easy and comfortable (bus, tram) and distance to Heidelberg main station is only 1,7 km walking distance and reachable also directly by Bus and tram

There is a Youth Hostel nearby on campus, but ouy may have to book early. We do not arrange lunch during the meeting, but close to the conference venue there is a „Bavarian style resaturant“ (49.41780, 8.674398), backeries, a supermarket (49.419151, 8.675469) and nearby the Botanical Garden there is a nice mensa café (49.415349, 8.670423). For student we will also arrange Campus-Mensa-Cards to be provided „on loan“ (5 €), which can be topped up with money according personal needs.

Local organizing committe: Marcus Koch, Christiane Kiefer, Nora Walden, Markus Kiefer, Claudia Hauber