



# Deep Metazoan Phylogeny 2011

## New data, new challenges



Munich 11–14 October 2011

SPP 1174 "Deep Metazoan Phylogeny"

[www.palmuc.de/dmp2011](http://www.palmuc.de/dmp2011)



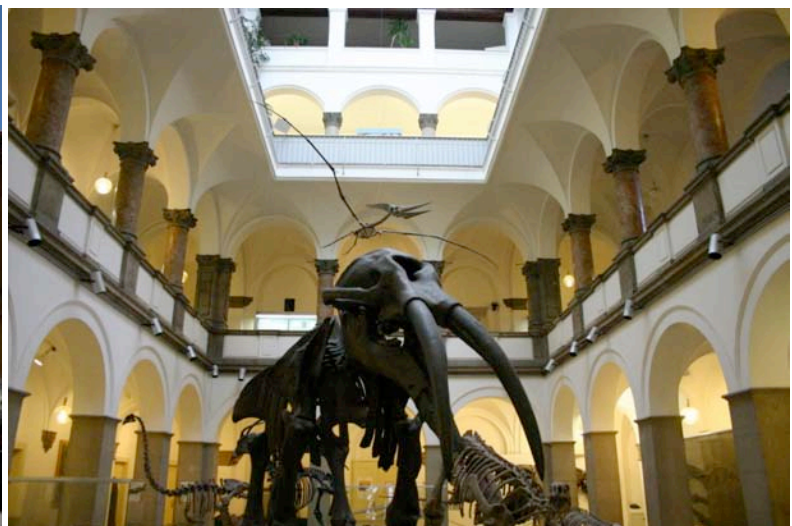
This is the second circular for the Deep Metazoan Phylogeny Conference 2011. It provides you with all practical facts, which can also be found on our website <http://www.palmuc.de/dmp2011>, additional information and important updates.

## Registration

Registration on Tuesday 11<sup>th</sup> October will take place in the Palaeontological Museum (Richard-Wagner-Str 10, room 109, 1<sup>st</sup> floor). During the other days, the registration desk will be open from 8.00 to 18.00 h. You will receive a conference bag containing the programme for the conference, the book of abstracts, useful information about Munich, and your ticket(s) for the dinner on Friday (if applicable). If you have outstanding registration costs to pay, please pay these in cash (only EUR can be accepted) at the registration desk. A signed receipt will be provided in the conference bag.

## Change of the conference venue – IMPORTANT!

The conference venue has been CHANGED! It will take place at the Palaeontological Museum Munich, Richard-Wagner-Str 10, 80333 Munich, which is not far from the original venue, and close to the Central Station (see map below). The building of the Museum dates from 1902, it was styled by Leonhard Romeis and has romantic plastering ornaments, an atrium and an enchanting inner and outer architecture (<http://www.palmuc.de/bspq/>). It provides a perfect setting for the conference.



## Summary of programme

**October 11:** Arrival/Registration

18:00 - 21:00 h Icebreaker Party (room 102, 1<sup>st</sup> floor)

**October 12:** 8.30 h Opening Ceremony, Welcome Addresses (lecture theatre 230, 1<sup>st</sup> floor)

9.00 h Symposium 1: Innovations in analyses of molecular and morphological data (lecture theatre 230, 1<sup>st</sup> floor)

17.30 – 20 h Poster Session (room 110, 1<sup>st</sup> floor)

**October 13:** 9.00 h Symposium 2: Molecular phylogeny: new markers and phylogenomic analyses (lecture theatre 230, 1<sup>st</sup> floor)

17.30 h Poster Session (room 110, 1<sup>st</sup> floor)

19.00 h Evening Lecture (lecture theatre 230, 1<sup>st</sup> floor)

**October 14:** 9.00 h Symposium 3: The evidence found in morphology (lecture theatre 230, 1<sup>st</sup> floor)

18.00 – 18.30 h Concluding Remarks and Poster Award (lecture theatre 230, 1<sup>st</sup> floor)

19.00 h Conference Dinner (Augustinerkeller)

## Icebreaker Party

The Icebreaker Party will be on Tuesday 11<sup>th</sup> October at 18.00 h in the Palaeontological Museum, Richard-Wagner-Str. 10 (room 102, 1<sup>st</sup> floor; the 2<sup>nd</sup> floor with a special exhibition will be open as well).

## Conference Dinner

The Conference Dinner will take place at the Augustiner Keller on the 14<sup>th</sup> October, commencing at 19.00 h. Note that this is a ticketed event. ([www.augustinerkeller.de](http://www.augustinerkeller.de))



## Oral and Poster Contributions

### Talks:

The TOTAL time allocated for each oral presentation is **15 min** including questions. **Please load your presentation onto computers well in advance, at the latest during the coffee/lunch break before your session, so that potential technical issues can be sorted out before the sessions commence.**

Mac (OSX 10.6 Snow Leopard; Keynote `09, Powerpoint 2008) and PC (Powerpoint 2003) will be supported. However, PDF is the preferred format for presentations.

### Posters:

The maximum poster size is **A0 in portrait** setting. It is of course no problem if your poster slightly exceeds these limits, but we cannot display landscape posters. Posters can be set up from Tuesday 18.00 h and will be displayed throughout the conference in room 110. Adhesive materials or rails will be provided; poster boards will be labelled. **There will be dedicated poster sessions on Wednesday 12<sup>th</sup> October 17.30 – 20.00 h and on Thursday, 13<sup>th</sup> October 17.30 – 19.00 h; we suggest that authors will be available at their posters during poster sessions.**

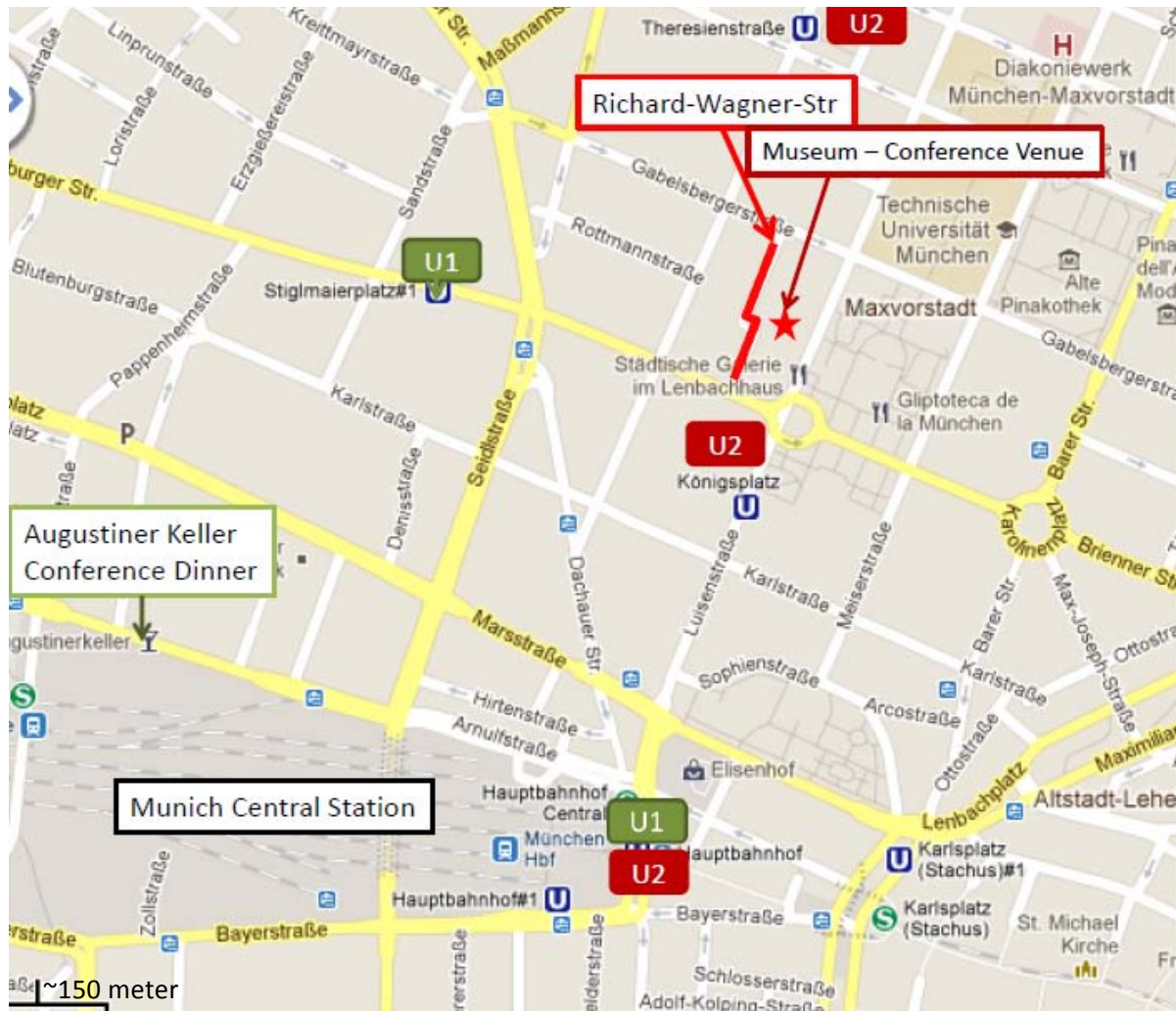
## Travel to Munich

**Arriving by airplane:** Munich has an international airport ([MUC](#)), which is located NE of the city. From there you can take two suburban trains ([S-Bahn](#)) into town, **line S1 or S8**, which depart directly beneath Terminal 1. Exit at station "Hauptbahnhof" (Central Station); then you can either take the subway (U-Bahn) **line U2** direction "Feldmoching" to "**Königsplatz**" or you can walk to the venue (~10-15 minutes). You can also use the **line U1** direction "Olympia-Einkaufszentrum" to "**Stiglmaierplatz**", and walk a few minutes more (see map below).

**Arriving by international rail services:** The venue is close to the main **Central Station** (10-15 minutes walk), north of the city center. Instead of walking, you can take the subway (U-Bahn) **line U2** direction "Feldmoching" from the Central Station (Hauptbahnhof) to **Königsplatz** or the **line U1** direction "Olympia Einkaufszentrum" to "**Stiglmaierplatz**" (see map below).

**By car:** It is not recommended to drive to the venue, as parking spaces are very scarce and expensive. However, if you have to drive to the venue, the best chance to find parking spaces will be on Luisenstrasse (see map below).

**Public transport:** The venue is close to the metro stations "**Königsplatz**" **line U2** and "**Stiglmaierplatz**" **line U1** (see map below).



## Accommodation

Participants must make their own arrangements for accommodation. Early booking is highly recommended, as Munich is a very busy city. Rooms can be booked using the links on the Deep Metazoan Phylogeny website.

## Germany and Munich

### *Emergency phone numbers:*

Medical emergency: 19 222; Police: 110; Fire brigade 112

### *Munich Tourist Information:*

For tourist information please contact the Munich Tourist Office.

<http://www.muenchen.de/>

*Taxi company:* +49 89 / 19 410

## Contact

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**Local Organising Committee:** Nicola Heckeberg, Tetyana Nosenko, Oliver Voigt, Gert Wörheide.

**Scientific Committee:** Thorsten Burmester (Hamburg), Thomas Stach (Berlin), Wolfgang Waagele (Bonn), Gert Wörheide (München).

## Acknowledgements

We would like to express our appreciation to the following, who provided generous support for the conference:



**We look forward to welcoming you in Munich!**



## DMP 2011 – preliminary final Programme

**October 11:** Arrival, Registration, Icebreaker 18:00 to 21:00

**October 12:** Symposium1; Poster Session; Registration from 8:00h

**October 13:** Symposium 2; Evening Lecture

**October 14:** Symposium 3; Concluding Remarks & Poster Award, Conference Dinner

**Venues:** Palaeontological Museum, Richard-Wagner-Str. 10, 80333 München  
 Conference Dinner: Augustinerkeller, Arnulfstr. 52, 80335 München  
 ([www.palmuc.de](http://www.palmuc.de); [www.augustinerkeller.de](http://www.augustinerkeller.de))

<b>Symposium 1: Innovations in analyses of molecular and morphological data</b>		
<b>Coordination:</b> Waegele		
<b>Wednesday, October 12</b>		
<b>Starting 8:00 registration</b>		
	<b>Speaker</b>	<b>Theme</b>
8.30-9.00		Opening Ceremony Welcome addresses
9.00-9.30	Misof, B.	Introduction
9.30-10.00	Anisimova, M.	Fast and accurate evaluation of phylogenetic clade support
10.00-10.30	Stamatakis, A.	Fishing in the dark: Trying to identify rogue taxa
10.30-11.00		<i>Coffee break</i>
11.00-11.15	de Oliveira Martins & Posada	Inference of species tree distribution using a probabilistic reconciliation cost
11.15-11.30	Nguyen et al., von Haeseler, A.	MISFITS: Evaluating the goodness of fit between a phylogenetic model and an alignment
11.30-11.45	Rota Stabelli et al.	Parallel codon usage and compositional bias in deep phylogenomic
11.45-12.00	Conrad et al., Poustka, A. J	Runtime optimization of complex mixture models of phylobayes for large scale phylogenetic tree reconstruction using GPU's.
12.00-13.30		<i>Lunch</i>
13.30-14.00	Boussau et al.	Integrative models of genome evolution
14.00-14.30	Kück et al.	Detection of bias in simulated and real data
14.30-14.45	Wilkinson & Day	Testing hard polytomies with partial splits
14.45-15.00	Groussin et al.	The COaLA Model: a Time Non-Homogeneous Model of Evolution Based on a Correspondance Analysis
15.00-15:15	Klopfstein et al.	How deep is the hymenopteran tree? A total-evidence approach to dating with fossils
15.15-15.30	Bernt & Middendorf	Rearrangement Analysis for Large Sets of Gene Orders: Towards Reconstructing the Evolution of Metazoan Gene Orders
15.30-16.00		<i>Coffe break</i>
16.00-16.30	Stadler, P.	Molecular morphology: higher order characters derived from sequence data
16.30-16.45	Vogt & Grobe,	Using the matrix module of Morph•D•Base for collaboratively editing character matrices live and online
16.45-17.00	Böhmer et al.	Hox code and vertebral morphology in archosaurs
17.00-17.15	Greenwood et al.	Mapping metazoan morphospace
17:30-20:00		<b>Poster session with Bavarian beer</b>

<b>Symposium 2: Molecular phylogeny: new markers and phylogenomic analyses</b> <b>Coordination:</b> Wörheide & Burmester <b>Thursday, October 13</b>		
	<b>Speaker</b>	<b>Title</b>
9.00-9.30	Wörheide, G.	Introduction: the status quo of higher-level metazoan phylogeny based on phylogenomic analyses
9.30-10.00	Philippe, H.	Resolving difficult phylogenetic questions: why adding more sequences is not enough
10.00-10.30	Lavrov, D.	Mitochondrial genomic diversity in non-bilaterian animals: implications for phylogeny and evolution
10.30-11.00		<i>Coffee break</i>
11.00-11.15	<u>Schierwater</u> et al.	Can we resolve the base of the Metazoa: If yes, why not?
11.15-11.30	<u>Ryan</u> et al.	The genome of the ctenophore <i>Mnemiopsis leidyi</i> and its impact on our understanding of animal history
11.30-11.45	<u>Nosenko</u> et al.	Early metazoan phylogeny: identifying obstacles and solutions
11.45-12.00	<u>Huchon</u> et al.	Illuminating the phylogenetic position of Myxozoa using next-generation sequencing
12.00 -13.30		<i>Lunch</i>
13.30-14.00	Peterson, K.	MicroRNAs and the Evolution of Metazoan Complexity
14.00-14.30	Hausdorf, B.	Phylogenomic relationships between lophotrochozoan phyla – phylogenetic signal versus systematic errors.
14.30-14.45	<u>Merkel</u> et al.	A morpho-molecular approach to assess phylogeny – first developmental data of Entoprocta
14.45-15.00	<u>Wey</u> et al.	About wheels, thorns and trees – The phylogeny of Syndermata in the light of EST data
15.00-15:15	<u>Lieb</u> , B.	What do DNA, RNA and proteins tell us about molluscan phylogeny?
15.15-15.30	<u>Helm</u> et al.	On the phylogenetic position of Myzostomida – integrating molecules and morphology
15.30-16.00		<i>Coffee break</i>
16.00-16.30	von Reumont, B.	Discovering the evolution of arthropods: prospects and pitfalls of molecular methods including phylogenomic data
16.30-16.45	<u>Burmester</u> et al.	A phylogenomic approach to arthropod relationships and divergence times
16.45-17.00	<u>Simon</u> & Hadrys	Pterygote phylogenomics: The evolutionary history of genes and their impact on the topology
17.00-17.15	<u>Meusemann</u> et al.	Phylogeny of primary wingless hexapods: chances, challenges and pitfalls of “phylogenomic” approaches
17.15-17.30	<u>Pisani</u> et al.	MicroRNA and phylogenomics congruently resolve the phylogenetic relationships of the Tardigrada within Ecdysozoa
17.30-19.00		<b>Poster session with Bavarian beer</b>
19.00-19.45	Phil Donoghue	<b>Evening lecture:</b> Reconciling fossils, molecules and morphology in deep metazoan phylogeny



<b>Symposium 3: The evidence found in morphology</b>		
<b>Coordination: Stach</b>		
<b>Friday, October 14</b>		
	<b>Speaker</b>	<b>Title</b>
9.00-9.30	Richter, St.	The role of morphology in evolutionary research
9.30-9.45	Nickel et al.	Evolution of body contractility in early branching Metazoa – what morphology of Porifera and Placozoa tells us
9.45-10.00	Gruhl et al.	Minicollagen expression supports homology of myxozoan and cnidarian organelles
10.00-10.30	Loesel, R.	Reviewing neurophylogeny – advances since the turn of the millennium
10.30-11.00		<i>Coffee break</i>
11.00-11.15	Hejnal, A.	Reconstructing the ground pattern of the Acoelomorpha – molecular patterning of the blind gut, nervous system and other features
11.15-11.30	Rieger et al.	Development of the nervous system in hatchlings of <i>Spadella cephaloptera</i> (Chaetognatha)
11.30-11.45	Purschke, G.	Unpigmented ciliary photoreceptor cells and organs in Annelida – diversity and importance for in-group phylogenetic relationships
11.45-12.00	Ullrich-Lüter et al.	Function and evolution of echinoid photoreceptors
12.00 -13.30		<i>Lunch</i>
13.30-14.00	Lowe, C.	Uncoupling morphological and molecular evolution: deep deuterostome origins of the vertebrate head developmental program
14.00-14.30	Stach, T.	Phylogenetic patterns from morphogenetic processes
14.30-14.45	Fritsch & Richter	From a clam shrimp to a water flea: evolutionary insights from developmental sequences in the nervous system of branchiopod larvae (Crustacea)
14.45-15.00	Maas et al.	Deep crustacean phylogeny
15.00-15.15	Pennerstorfer & Scholtz	Early cleavage in Phoronida shows spiral features
15.15-15.30	Ruthensteiner et al.	Highly variable patterns in development of metanephridial and coelomic system in molluscs
15.30-16.00		<i>Coffee break</i>
16.00-16.30	Laubichler, M.	Reconstructing ancestors: the lessons from developmental evolution
16.30-16.45	Koch et al.	Morphogenesis and homology of coeloms and nephridia in annelids and arthropods
16.45-17.00	Kaller et al., Hausen, H.	The “division of labour model” for cell type specialization of annelid cerebral eyes
17.00-17.15	Schmidt-Rhaesa & Birgen	The nervous system of Nematelminthes – is the taxon Nematelminthes valid?
17.15-17.45	Jenner, R.	Please mind the gaps: exploring the limits of our understanding of animal body plan evolution
17:45-18:15	DMP Organizers	Concluding Remarks: Deep Metazoan Phylogeny – where to now?; Poster award
<b>19.00-23.00</b>		<b>Conference Dinner</b>