



German Centre for Integrative **Biodiversity Research**

sDiv Workshop "Synthesizing phylogenetic measures for ecology and conservation - sPHY" 19.-22.11.2013 Workshop Summary

for Integrative Biodiversity Research (iDiv), Halle-Jena-Leipzig Deutscher Platz 5e 04103 Leipzig, Germany phone +49 (0)341 97-33103 info@idiv-biodiversity.de www.idiv-biodiversity.de

German Centre

Summary

Brief summary of presentations

- Marten Winter opened the workshop, welcoming participants and introducting iDiv.
- Dan Rosauer introduced some of the central issues for the use of phylogenetic measures in conservation.
- Marc Cadotte introduced phylo measures in community ecology.
- Jonathan Davies described his work on the relationships between mammalian phylogenetic diversity and species richness.
- Caroline Tucker presented her recent work on synthesizing phylogenetic metrics for ecology and conservation, including the circumstances and causes of correlations between metrics.
- Marten Winter presented material related to his recent review in TREE of the uses and limitations of phylogenetic diversity metrics in conservation.

Focal areas of discussion

There were three main areas of discussion:

- 1) What are the main questions people ask in ecology and conservation that use phylogenetic information?
- 2) What are the mathematical similarities/differences among different types of phylogenetic measures?
- 3) Can simulations determine the influence of phylogenetic and spatial structure on phylogenetic metrics correlations?

Proposed outputs and workplan

The group is working on a large paper that incorporates the three focal areas. A draft is expected in April. For the next meeting, data and simulations will be prepared and used to answer specific questions. Questions will be decided before hand and group will be subdivided into small subgroups focussed on particular questions.

New collaborations

Several researchers were excited by the new possibilities. Each of the three focal areas included people who have never worked together before. People also started discussion on the next questions and were forming new collaborations.





General working atmosphere and feedback on sDiv-support

The workshop was enjoyable, and marked very positive, productive Participants remarked that it was particularly friendly, atmosphere. collaborative and productive event. A good range of complementary skills among the participants led to the synthesis of new ideas which should be reflected in the resulting paper(s).

The support provided by sDiv was key to the success of the workshop. The smooth organization by the whole sDiv team, the excellent meeting facilities and accommodation supported the participants to focus on the problem we had set ourselves.

Participant List

Surname	Name	Institution	Homepage
Cadotte	Marc	University of Toronto	http://www.utsc.utoronto.ca/~ mcadotte/Cadotte_lab/Contact. html
Carvalho	Silvia	University of Porto	http://cibio.up.pt/cibio.php?con tent=members&menu=member s&member=sbcarvalho
Davies	Jonathan	McGill University	http://biology.mcgill.ca/faculty/ davies/
Ferrier	Simon	CSIRO	http://www.csiro.au/Organisati on- Structure/Divisions/Ecosystem- Sciences/SimonFerrier.aspx
Fritz	Susanne	Biodiversity and Climate Research Centre (BiK-F) & Senckenberg Gesellschaft für Naturforschung	<u>http://www.bik-</u> f.de/root/index.php?page_id=7 <u>72</u>
Grenyer	Rich	Oxford University	http://www.geog.ox.ac.uk/staff /rgrenyer.html
Helmus	Matthew	VU University	http://www.agci.vu.nl/en/news- agenda/Newsletter/postdocs/Ma tthew-Helmus/
Jin	Lanna	University of Toronto	http://spatecology.wordpress.c om/
Mazel	Florent	Univ. Joseph Fourier	https://sites.google.com/site/m azelflorent/home
Mooers	Arne	Simon Fraser University	http://www.sfu.ca/~amooers/





Pavoine	Sandrine	Museum National D'Histoire Naturelle	http://www2.mnhn.fr/cersp/spi p.php?rubrique26
Purschke	Oliver	German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig	<u>http://www.idiv.de/</u>
Redding	Dave	University College London	http://www.ucl.ac.uk/cber/cont act-us
Rosauer	Daniel	Australian National University	sites.google.com/site/danielrosa <u>uer</u>
Tucker	Caroline	University of Colorado, Boulder	http://individual.utoronto.ca/ca rolinetucker/
Winter	Marten	German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig	<u>http://www.idiv.de/sdiv</u>



