

Bibliography Annette Grathoff, Dr. rer. nat. (Biology, Chemical Ecology)

(2023) [Non-linear frequency mixing and amplification]

"Structural basis of nonlinear frequency combination" contribution to the section „Die Bedeutung des Lebens im Universum" (The meaning of life in the universe) chaired by Prof. i. R. Dr. Dr. Rainer E. Zimmermann (Berlin); p.25-35 (in German) in Li, W.; Wahl, C.; Erdner, S.; Schwarze, B.C.; Dan, Y. (Hrsg.): "Le present est plein de l'avenir, et chargé du passé" : Vorträge des XI. Internationalen Leibniz-Kongresses, 31. Juli – 4. August 2023, Leibniz Universität Hannover, Deutschland. Band 2. Hannover : Gottfried-Wilhelm-Leibniz-Gesellschaft e.V., 575 S.
<https://doi.org/10.15488/14329>

(2023) [Braess Paradox - Dual nature between inequality in potential and new paths?]

How Much Rationality Is Needed for Decision Making? *Comput. Sci. Math. Forum* 2023, 8, 12.; Presented at Forum on Information Philosophy—The 6th International Conference of Philosophy of Information, IS4SI Summit 2023, Beijing, China, 14 August 2023.
<https://doi.org/10.3390/cmsf2023008012>

(2022) [Nonlinearities and Interference]

Nonlinearities and Interference - their importance for the study of information; *Proceedings 2022*, 81(1), 61;
<https://doi.org/10.3390/proceedings2022081061>

(2022) [Plenum essay]

Organizer of the special session of the IS4SI Summit 2021 (held online) from 12th–19th of September 2021, "Information in Natural Sciences" (13-15th & 17th of September) Short summary published in "Information in Natural Sciences". *Proceedings 2022*, 81, 35.
<https://doi.org/10.3390/proceedings2022081035>

(2021) [Book chapter]

Zur expliziten Funktion des Lebens innerhalb des physikalischen Universums p.247-317 (in German); in *Neue Aspekte der Naturdialektik. Die Bedeutung des Lebens im Universum*; Editor Rainer Zimmermann; Wissenschaftlicher Verlag Berlin 2021; ISBN 978-3-96138-293-4.

(2021) [Speculative essay on structure - field interaction]

Boomerang and Hologram - two examples of information in motion. The exploration of physical kinetic and structural information p.52-70; in *Proceedings of the remote workshop: A quest for an interface between information and action* Gaeta, 7,9,20 April 2021 (online); Editors Pier Francesco Moretti, Vasileios Basios; @2021, Consiglio Nazionale delle Ricerche; ISSN 2724-6132.
http://www2.foresight.cnr.it/media/attachments/2022/04/11/proceedings_a-quest-for-an-interface-between-information-and-action_issn-2724-6132_2021-8.pdf

(2019) [Stonier´s Structural and Kinetic Components of Physical Information]

Exploration of Structural and Kinetic Components of Physical Information; *Proceedings 2020*, 47, 16; Presented at the Theoretical Information Studies (TIS) session at IS4SI Summit 2019, Berkeley, USA, 2nd of June 2019.
<https://doi.org/10.3390/proceedings2020047016>

(2018) [Book chapter]

Information as a feature of evolving conservative systems. Stonier's Approach Revisited; in *Ontologische Probleme der Grundlegung nach Schelling und Bloch*; Editor Rainer Zimmermann; Kovac, Dr. Verlag 2018; ISBN 978.

(2018) [Concurrency]

Mark Burgin & Annette Grathoff; Concurrent systems and time synchronization; *International Journal of General Systems*, 2018, <https://doi.org/10.1080/03081079.2018.1425298>

(2017) [Manifesto]

Rainer E. Zimmermann, Wolfgang Hofkirchner, José M. Díaz Nafría, Annette Grathoff, Tomáš Sigmund and Xiaomeng Zhang; *Evolutionary Systems. A Manifesto*; *Proceedings 2017*, 1, 253; <https://doi.org/10.3390/proceedings1030253>

(2017) [Stonier's Structural and Kinetic Components of Physical Information]

Stonier's Definition for Kinetic and Structural Information Revised; *Proceedings 2017*, 1, 251; Presented at the session Possibility and Actuality: Towards a Manifesto on Evolutionary Systems at IS4SI Summit 2017, Gothenburg, Sweden, 12th of June 2017.

<https://doi.org/10.3390/IS4SI-2017-04012>

(2017) [Importance of Principle of stationary action in evolution]

An Evolutionary View on Function-Based Stability; *Proceedings 2017*, 1, 54; Presented at the session Foundations of Information Science at IS4SI Summit 2017, Gothenburg, Sweden, 15th of June 2017.

<https://doi.org/10.3390/IS4SI-2017-03920>

(2016) [Competition entry]

Poster and Presentation at the European Meeting on Cybernetics and Systems Research (EMCSR) 2016: „The Evolution of Information Processing Systems”.

(2010) [Thesis]

Einfluss limnischer Makrophyten auf Bakterioplankton-Gemeinschaften - Veränderungen der Zusammensetzung von Bakterioplankton -Gemeinschaften in unmittelbarer Nähe von *Iris pseudacorus* und *Mentha aquatica*, Südwestdeutscher Verlag für Hochschulschriften 2010.

(2005) [Patent]

Method and device for combating caterpillars up oak trees involves providing artificial trail over natural trail to lead caterpillar down to collecting container at bottom of trunk (German Patent DE102005013588) (in German)

<https://depatisnet.dpma.de/DepatisNet/depatisnet?action=pdf&docid=DE102005013588A1&xxxfull=1>

(2005) [Diploma thesis poster]

Poster and presentation at the graduate meeting of the German Zoological Society 2005 at Würzburg „Evolutionary Chemical Ecology“: „Scents from sphingophilous flowers electrophysiologically tested with sphingid antennae in an EAG assay“.