

2022

Annette Grathoff published two contributions in the proceedings of the IS4SI: First, a short summary of the special session of the IS4SI Summit 2021 (held online) from 12th–19th of September 2021, “Information in Natural Sciences”. *Proceedings 2022*, 81, 35. <https://doi.org/10.3390/proceedings2022081035>, and the extended abstract on her presentation at the IS4SI summit 2021, "Nonlinearities and Interference—Their Importance for the Study of Information" *Proceedings 2022*, 81, 61. <https://doi.org/10.3390/proceedings2022081061>. The literature research for the presentation and the subsequently published extended abstract showed that a lot of practical knowledge about nonlinear frequency mixing and the generation of "emergent" new frequencies from communication technology is not well considered in basic research on communication in Biology and the humanities. The generation of novelties from a nonlinear combination - a combination with a coupling - of previously independent units is a very central topic for Biology and evolutionary development studies. As a consequence, Annette Grathoff focused her research for the years 2021-22 and the year to come on references from nonlinear optics, nonlinear audio processing and music. The goal is to strengthen the basis for basic research with knowledge from empirical studies as it was announced in the project description.