List of presentations

Tuesday, 20 September

8:30 - 10:25 **Session: Behavior 1** (ch. Meta Virant-Doberlet)

Biotremology: where we are, where do we go – introductory lecture (Meta Virant-Doberlet, Slovenia)

Deciphering the evolutionary patterns of spider songs (and dances) (Eileen Hebets, USA)

Variability of vibratory performance during courtship of a cursorial spider (Morgan Oberweiser, Germany)

Courtship signalling in the Western Black Widow spider (Araneae: Theridiidae) (Andrew Mason, Canada)

11:00 - 12:50

Session: Behavior & interspecific interactions

(ch. Hannah ter Hofstede)

The effect of band-passed noise on the vibrational communication and searching behaviour of *N. viridula* males (Rok Janža, Slovenia)

Spontaneous emission of vibrations by the planthopper Scolypopa australis: does the »ballerina« sing as well? (Sabina Avosani, Italy)

Vibrational duetting and signal production in Aprhodes makarovi leafhoppers (Anka Kuheli, Slovenia)

Leafhopper males compensate for unclear directional cues in vibrationmediated mate localization (Jernej Polajnar, Slovenia)

Exploring the role of vibrational cues in a parasitoid-host interaction (Caterina Zippari, Italy)

Influence of vibrational cues on G1 Ganaspis cf. brasiliensis host searching **behaviour** (Lorenzo Fellin, Italy)

14:20 – 16:10 **Session: Behavior 2** (ch. Wolfgang Kirchner)

Back to the roots: vibrational communication in cave planthoppers (Hemiptera: Fulgoromorpha) (Hannelore Hoch, Germany)

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Vibrational communication in the bark beetle *Ips typographus* (Julian Kampschulte, Germany)

Testing alternative hypotheses for the origin of vibrational signaling in **lebinthine crickets** (Hannah ter Hofstede, USA)

Birds feel the vibes: the role of vibrations in songbird courtship communication (Nao Ota, Germany)

Cicadatra persica use tymbal sounds and wing clicking during the courtship song (Matija Gogala, Slovenia)

A study of multimodal communication using multiple approaches: Uncovering signal functions in a neotropical katydid (Jennifer Hamel, USA)



Tuesday 20 September (cont.)

16:40 - 17:30

Session: Behavior & miscellaneous

(ch. Nataša Stritih-Peljhan)

The post-diapause vibrational behaviour of the brown marmorated stink bug *Halyomorpha halys* (Stål) adults at different temperatures (Jalal Fouani, Italy)



Developmental environment shifts choice of feeding environment, signaling environment and signal properties in the treehopper *Entylia carinata* (Kasey Fowler-Finn, USA)



An open-source tool for conducting high-fidelity vibrational playbacks (Alana Evora, USA)



Wednesday, 21 September

8:30 – 10:30 **Session: Behavior & social insects** (ch. Rachele Nieri)

Stinkbug love story (Andrej Čokl, Slovenia)

Tremolo dancing with multimodal signals in jewel bugs (Hiromi Mukai, Japan)



The important role of parental vibrational signaling during brood care in the burying beetle Nicrophorus vespilloides (Taina Conrad, Germany)

Sex and caste effects on the sensitivity of the sense of vibrations in honeybees (Apis mellifera) (Sarah Chehaimi, Germany)

A comparative analysis on vibrational signals in burying beetles (Caterina Rughetti, Germany)

11:00 – 12:50 **Session: Behavior & ecology** (ch. Eileen Hebets)

Vibroscape variability within hay meadow habitat (Behare Rexhepi, Slovenia)

Active space of substrate-borne signals in a hay-meadow habitat (Juan José Lopez Díez, Slovenia)

In search for information in the hidden world of vibroscape (Rok Šturm, Slovenia)

Who's shaking? On using machine learning to detect vibrational signals in laser vibrometry recordings (Matija Marolt, Slovenia)

Vibratory communication of the Russian-leather beetle – a field study (Manfred Hartbauer, Austria)

Comparing airborne and substrate-borne signaling investment across pseudophylline katydids (Ciara Kernan, USA)

The role of amplitude in a multimodal insect duet (Mia Phillips, USA)

Wednesday, 21 September (cont.)

14:20 - 16:10

Session: Behavior, ecology & morphology

(ch. Taina Conrad)

Vibrations in multimodal interactions in insects (Alenka Žunič Kosi, Slovenia)

A multicomponent acousto-vibratory courtship described for the first time in a model cricket species (Nataša Stritih Peljhan, Slovenia)

The subgenual organ complex in stick insects: Functional morphology and its implications for vibration detection (Johannes Strauß, Germany)

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Morphological coupling of mechanosensory organs in stick insects (Johannes Strauß, Germany)



Exploring the role of plant heterogeneity on the transmission of insect vibrational signals (Rowan McGinley, USA)



Characterization of substrate-borne vibrational communication of *Bagrada hilaris* (Marica Scala, Italy)



16:40 – 18:20 **Session: Behavior 4** (ch. Andrew Mason)

Unpredictable vibratory environments affect prey capture and web structure of the funnel-weaving spider *Agelenopsis pennsylvanica* (Brandi Pessman, USA)



Does male vibratory courtship influence female predatory behaviour in the cursorial spider, *Pisaura mirabilis*? (Stefan ter Haar, Netherlands)

Rethinking communication and sexual selection in spiders (Damian Elias, USA)



Thursday, 22 September

8:30 - 10:30

Session: Applied biotremology 1

(ch. Takuma Takanashi)

Applied biotremology towards the future (Valerio Mazzoni, Italy)

Five years of vibrational mating disruption in the vineyard (Imane Akassou, Italy)

Substrate-borne vibrations reduced the infestation of the tobacco whitefly Bemisia tabaci (Hemiptera, Aleyrodidae): an experimental assessment in tomatoes, Solanum lycopersicum (Haruki Tatsuta, Japan)



Substrate-borne vibrational signals and stridulatory organs for sexual communication in leafminer, *Liriomyza sativae* (Diptera: Agromyzidae) (Qikai Zhang, China)



11:00 - 13:10

Session: Applied biotremology 2

(ch. Valerio Mazzoni)

Exploitation of vibration sensing for pest management in whiteflies (Takuma Takanashi, Japan)

Not just mating: The unexpected side-effects of the disturbance noise on the flight activity and oviposition behavior of leafhoppers (Rachele Nieri, Italy)

Vibrational monitoring of invasive hoppers in the apple agroecosystem (Giovanni Dalmaso, Italy)

Vibrational disruption approaches for interfering with vector-borne plant pathogens transmission (Valentina Zaffaroni-Caorsi, Italy)

Potential use of acoustic communication for pear psylla IPM (Dowen Jocson, USA)

Potential of biotremology for monitoring and control of stink bugs: a Brazilian experience (Raul Alberto Laumann, Brazil)



How to teach biotremology in experimental home lab classes under Covid-19 lockdown conditions (Wolfgang Kirchner, Germany)

Legend:

