

XXVI International Bioacoustics Congress

(October 8–13, 2017)



SCIENTIFIC PROGRAMME

CONGRESS VENUE
HOTEL HYPHEN GRAND, SIDCUL, HARIDWAR, INDIA



Organized by
Department of Zoology and Environmental Science
Gurukula Kangri Vishwavidyalaya
Haridwar, India

SPONSORS



DODOTRONIC



SUNDAY 8TH OCTOBER, 2017

09:00-11:00 Registration
11:00-12:30 Inauguration/ Welcome

12:30- 14:00 Social Lunch

14:00-15:00 Plenary Talk I **Marta B. Manser, Switzerland**
The evolution of variation in structure and function in mammalian vocalization

15:00-16:40 Symposium I **Coding strategies in vertebrate acoustic communication**

Chair/ Co-chair: Thierry Aubin (France) & Nicolas Mathevon (France)

15:00 Ole Næsbye Larsen, Denmark Strategies for encoding public and private information in propagating sound signals
15:20 Thierry Aubin/Nicolas Mathevon, France The code size: Crocodile mothers react more to the voice of smaller offspring
15:40 Paula Verzola-Olivio, Brazil More than an alarm call: Functional flexibility and coping style in Capybaras barking behaviour
16:00 Marta B. Manser, Switzerland Signaling alteration in Meerkats when two vocal interactions related to different contexts temporarily overlap

16:20-16:50 Coffee Break

16:50-19:10 Oral Session I

Chair/ Co-chair: Rohini Balakrishnan (India) & Henrik Brumm (Germany)

16:50 Abel Souriau, Czech Republic Practicing for spring? A first look on Thrush nightingale's vocalization at wintering grounds
17:05 Juliette Florentin, Belgium Towards a full map of drumming signals in European woodpeckers
17:20 Aloïs Robert, France Acoustic competition and bird song evolution: An island/mainland comparison

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| 17:35 | Anil Kumar, India | Characteristics of vocalizations in some species of bulbuls from Arunachal Pradesh, India |
| 17:50 | Anna Jakubowska/ Tomasz Postawa, Poland | Morphological adaptations can help understanding the evolution of bats echolocation: Correlation between outer and inner ear morphology and echolocation calls design |
| 18:05 | Alex Kirschel, Cyprus | Differential patterns of song similarity in Tinkerbirds leads to contrasting interactions among contact zones |
| 18:20 | Christina Masco, USA | The potential costs and benefits of a terminal trill in Splendid fairywrens (<i>Malurus splendens</i>) |
| 18:35 | Edith Julieta Sarmiento-Ponce, UK | The age of adult female crickets influences the acoustic attraction to male calling song in Cricket, <i>Gryllus bimaculatus</i> |

MONDAY 9TH OCTOBER, 2017

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| 09:00-10:00 | Plenary Talk II | David Reby, United Kingdom The evolution of size communication in sexually-selected mammal vocalizations |
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10:00-10:30 Coffee Break

10:30-12:30 **Symposium II** **Human voice modulation**

Chair /Co-chair: Katarzyna Pisanski & David Reby (UK)

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| 10:30 | Katarzyna Pisanski, UK | Vocal modulation of socially relevant traits in humans |
| 10:55 | David Reby, UK | Communication of sex-related attributes in the human voice: From babies' cries to adult speech |
| 11:20 | Nicolas Mathevon, France | Dog-directed speech: Why do we use it and do dogs respond? |
| 11:45 | Julia Simner, UK | Cross-modal relationships in vocal and non-vocal acoustics |

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| 12:10 | Julien Meyer, France | Adaptation of human speech to variable distances in a forest: A production/perception experiment |
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| 12:35- 13:30 | Lunch |
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| 13:30- 15:30 | Symposium III | Acoustic communication, sexual selection and reproductive systems |
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Chair/ Co-chair: Fanny Rybak (France) & Helene Courvoisier (France)

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| 13:30 | Marianna Anichini, Germany | Acoustic plasticity during competition of Bush cricket males: How to deal with stronger singing rivals? |
| 13:50 | Roland Frey, Germany | Impala - an African species of ruminants in which males retract the larynx for rutting call production |
| 14:10 | Paula Verzola-Olivio, Brazil | Communication between sexual partners in a mammal species: What is to be said? |
| 14:30 | Jessie C. Tanner, USA | Sources of noise-induced error in animal communication |
| 14:50 | Sharina van Boheemen, Czech Republic | The relationship between song and colour in the Yellowhammer - a field study |
| 15:10 | Diptarup Nandi, South Africa | Mate sampling strategies in the context of acoustic communication in Crickets: A sensory ecological perspective |

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| 15:30- 16:00 | Coffee Break |
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| 16:00-18:00 | Poster Session I | Poster No. 1 – 40 |
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| 18:00-19:30 | Cultural Evening |
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TUESDAY 10TH OCTOBER, 2017

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| 09:00-10:00 | Plenary Talk III | Julie Elie, USA Meanings in Zebra finch vocalizations: An investigation on acoustic and neural codes |
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| 10:00-10:30 | Coffee Break |
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| 10:30-12:30 | Symposium IV | Prospects for large scale collaborative soundscape datasets: Datamining, acoustic recording for primary biodiversity data |
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Chair: Klaus Riede (Germany)

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| 10:30 | Paul Roe, Australia | Eco-Sounds: A system for collecting, managing and analysing big eco-acoustic data |
| 10 :50 | Bas Yves, France | Articulating citizen science, automatic classification and open web services for long-term acoustic monitoring: Examples from bat monitoring schemes in France and UK |
| 11:10 | Edward Baker, UK | Towards a “BLAST”-able space for Orthopteran bioacoustics |
| 11:30-12:00 | Radhika Nagrath, India | Popular lecture: Scientific and cultural background of Indian Yoga |
| 12:00-12:15 | D.S. Malik, India | General talk: Acoustic telemetry methods for assessing fish migration patterns and natural breeding behaviour in river |

12:15 - 13:30 Lunch

13:30-15:30 Symposium V Vocal neuromechanics

Chair/ Co-chair: Raghav Rajan (India) & Anand Krishnan (India)

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| 13:30 | Nathan Merchant, UK | Responses of Bottlenose dolphins and Harbour porpoises to impact and vibration piling noise during harbour construction |
| 13:50 | Divya Rao, India | Effect of calls on initiation of the Zebra finch song |
| 14:10 | Anand Krishnan, India | Divergent vocal frequencies in assemblages of Asian barbets |
| 14:30 | Pawel Rek, Poland | Multimodal coordination enhances the effectiveness of an avian duet |
| 14:50 | Samuel J Sober, USA | Spike timing codes for vocal motor control |
| 15:10 | Soumya Iyengar, India | Opioid neuromodulation and singing in male Zebra finches |

15:30- 16:00 Coffee Break

16:00-18:00 Oral Session II Chair/co-chair: Vinod Kumar (India) & Hiroshi Riquimaroux (China)

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| 16:00 | Eduardo Romero-Vivas , Mexico | Time retrieval of spectrogram differences for automatic detection of dolphin whistles |
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| 16:15 | Elizabeth Znidersic, Australia | Sounding out marsh birds - automated classification techniques for acoustic data |
| 16:30 | Hiroshi Riquimaroux, China | Measurements of the cochlear functions of echolocating bats through the brainstem: Cochlear microphonics and compound action potentials |
| 16:45 | Maria Goretskaia, Russia | Testosterone influences the song structure and song rate in free living Wood warblers (<i>Phylloscopus sibilatrix</i>) |
| 17:00 | Ian Durbach, South Africa | Methods for identifying individual field crickets from their calls |
| 17:15 | Irina Marova, Russia | Communication in hybrid zones: Do birds "understand" the singing of closely related although different taxa? |
| 17:30 | James A. Simmons, USA | Multiple acoustic features create unitary biosonar images |
| 17:45 | Albertine Leitao, Germany | Song learning with multiple tutors |
| 18:00-19:30 | Poster Session II | Poster No. 41 - Last |

WEDNESDAY 11TH OCTOBER, 2017

09:00-10:00 **Plenary Talk IV** **Kazuo Okanoya, Japan**
Song complexity and domestication syndrome in Bengalese finches

10:00-10:30 Coffee Break

10:30-12:30 **Symposium VI** **Dynamic signalling in a dynamic world**

Chair/ Co-chair: Sue Anne Zollinger (Germany) & Masayo Soma (Japan)

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| 10: 30 | Sue Anne Zollinger, Germany | How birds maintain vocal communication in rapidly fluctuating environments |
| 10:50 | Nao Ota, Germany | Audience promotes complex acoustic signals in the courtship of a songbird |
| 11:10 | Sándor Zsebök, Hungary | Vocal plasticity and cultural evolution in the song of the Collared flycatcher (<i>Ficedula albicollis</i>) |
| 11:30 | Camille Desjonquères, USA | Predestined youth: Ontogeny of mating signals and mate preferences in a vibrational insect |

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| 11:50 | Renata D. Alquezar, Brazil | Bird song and stress response to airport noise in Brazil: A study case of a suboscine bird (<i>Elaenia chiriquensis</i> - Tyrannidae) |
| 12:10 | Tereza Petruskova, Czech Republic | Tuned for provider? Do cuckoo nestlings adjust their begging characteristics to the host species? |

12:30- 13:30 General Assembly Meeting

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| 13:30- 14:30 Lunch |
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14:30-19:30 Local Excursion

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| THURSDAY 12 TH OCTOBER, 2017 |
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| 09:00-10:00 | Plenary Talk V | Andrea M. Simmons, USA Tadpole bioacoustics: Sound processing across metamorphosis |
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| 10:30-12:30 | Symposium VII | Does size matter? Allometric principles in animal acoustic signals |
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Chair /Co-chair: Livio Favaro (Italy), Maxime Garcia (France) & Andrea Ravignani (Belgium)

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| 10:30 | Gerlind U.C. Lehmann, Germany | Sound structures and calling effort under sexual selection in Bushcrickets (Insecta: Orthoptera: Ensifera) |
| 10:50 | Livio Favaro, Italy | Syrinx- and vocal tract-related acoustic parameters encode species, individual, and body size information in Banded penguin vocalizations |
| 11:10 of | Olga V. Sibiryakova, Russia | Mother-young vocal communication: Effects open-mouth and closed-mouth call emission in three species of ruminants |
| 11:30 | Andrea Ravignani, Netherlands | How small could a pup sound? The physical bases of signalling body size in Harbour seals (<i>Phoca vitulina</i>) |
| 11: 50 | Maxime Garcia, Austria | Does size really matter? Revisiting acoustic allometry in primate vocal production |

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| 12:10 | Katarzyna Pisanski, UK | Human vocal communication of body size |
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| 12:30- 13:30 | Lunch |
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| 13:30-15:30 | Oral Session III | Chair/co-chair: Ole Larsen (Denmark) & Manfred Gahr (Germany) |
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| 13:30 | Karan J. Odom, USA | Quantitatively comparing female and male song across songbirds |
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| 13: 45 | Kerri Seger, USA | Information theory analysis of social calls used by tagged Humpback whale in the Los Cabos, México, breeding grounds |
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| 14:00 | Laura Kloepper, USA | Sensing in streams and swarms: Echolocation of bats in large groups |
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| 14:15 | Laure Desutter, France | How to grasp a frantic moving male Grandcolas |
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| 14:30 | Maria Luisa da Silva, Brazil | Multiple strategies of vocal communication in Humming birds |
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| 14:45 | Florencia Noriega Germany | Quantifying sequences of animal vocalization |
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| 15:00 | Mark Bee, USA | Could noise-cancelling lungs resolve a pulmonary paradox in vertebrate bioacoustics? |
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| 15:15 | Marcelo Araya-Salas, USA | Cognitive abilities predict song structure and territory tenure in a lekking species |
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| 15:30-16:00 | Coffee Break |
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| 16:00-18:00 | Oral session IV | Chair/ co-chair: Maria Lusía da Silva (Brazil) & Renata Sousa-Lima (Brazil) |
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| 16:00 | Matija Gogala, Slovenia | Wing clicking in cicadas: Attempts to clarify the mechanism with high speed video |
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| 16:15 | Neelu Anand Jha, India | Singing behaviour, song acquisition and song quality in generations of Zebra finches under constant light environment |
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| 16:30 | Pablo Bolanos, France | Analysis of the vocalizations of a flagship bird species (<i>Pharomachrus mocinno</i>): Implications for conservation status |
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| 16:45 | Alan McElligott , UK | Goats discriminate emotion-linked calls based on valence domestic pigs |
| 17:00 | Paul Devos, Belgium | Towards automated clustering of adult mole-rat vocalizations: Application of machine learning techniques |
| 17:15 | Raquel O. Vasconcelos, SAR China | Development of structure and function of the inner ear for acoustic communication in a vocal Teleost fish |
| 17:30 | Renata Sousa-Lima, Brazil | Habitat depended variation in the advertisement call of <i>Phyllomedusa nordestina</i> (Hylidaeh: Anura) |
| 17:45 | Righini Roberta, Italy | The use of ecoacoustics to monitoring environmental quality of natural areas |
| 18:00 | S. Harini, India | Understanding the variation in adult male Zebra finch song and behaviour during courtship with distance of communication |

19:15- onwards Conference Dinner

FRIDAY 13TH OCTOBER, 2017

09:00-10:00 **Plenary Talk VI** **Michael D. Greenfield, France**
Animal choruses emerge from receiver psychology

10:00-10:30 Coffee Break

10:30-12:30 **Symposium VIII** **Machine learning methods in bioacoustics**
Chair: Dan Stowell (United Kingdom)

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| 10:30 | Dan Stowell, UK | Bird audio detection challenge: Results and state of the art in automatic detection |
| 10:50 | Anton Gradisek, Slovenia | JSI sound: A machine-learning tool in Orange for classification of diverse biosounds |
| 11:10 | Vincent Lostanlen, USA | Deep convolutional networks for avian flight call detection |
| 11:30 | Anshul Thakur, India | A two-step bird species classification approach using silence durations in song bouts |

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| 11:50 | Juan Sebastian Ulloa, France | Estimating animal acoustic diversity in tropical environments using unsupervised multiresolution analysis |
| 12:10 | Regis Rossi Alves Faria, Brazil | Prospecting individual discrimination of Maned wolves' barks using wavelets |
| 12:30- 13:30 | Lunch | |
| 13:30- 15:30 | Oral session V | Chair/co-chair: Sripathi Kandula (India) Sunita Gudwani (India) |
| 13:30 | Svenja Tidau, UK | Noisy neighbours- behavioural impact of ship noise on the European hermit crab |
| 13:45 | Shyam Kumar Madhusudan, India | Vocal repertoire of Humpback whales at a near-shore site on the Western coast of India |
| 14:00 | Sunita Gudwani, India | Study of speech mechanics with acoustics of speech (spectrogram), dynamic (real time) MRI and functional MRI |
| 14:15 | Tess Gridley, South Africa | Social sounds from 'super-groups' of Hump back whales (<i>Megaptera novaeangliae</i>) from South Africa |
| 14:30 | Tomas Farago, Hungary | Acoustic correlates of separation anxiety in dogs |
| 14:45 | Tomás Honaiser, Rostirolla, Brazil | Starting from scratch: Setting up of an automated ecoacoustic long-term survey in a rich neotropical rain forest environment |
| 15:00 | Tomasz Osiejuk, Poland | The meaning of male call diversity in duets and solos of the Yellow-breasted boubou <i>Laniarius atroflavus</i> : An experimental approach |
| 15:15 | V. V Robin, India | Bird song variation across biogeographic and anthropogenic barriers in a Sky island system |

15:30-16:00 Coffee Break

Oral session V continues

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| 16:00 | K.K. Sharma, India | The acoustical communication system of Weaverbird, <i>Ploceus phillippinus</i> |
| 16:15 | Vladimir Ivanitskii, Russia | Branching, clustering and sequencing: How many syntax modes are there in a bird song? |

16:30-17:30

Valedictory

17:30-18:00

Coffee/ Tea

