

## QUIET DRONES PROGRAMME LIST OF ACCEPTED ABSTRACTS

- ***A summary of the 2018 Workshop on UAS and UAV Noise Emissions and Noise Control Engineering Technology in Washington, DC.***  
Robert Hellweg, Adnan Akay, Gregg Fleming, George C. Maling, Jr., Eric Wood: National Academy of Engineering (USA)
- ***Drone Noise a new public health challenge?***  
Antonio Torija Martinez: University of Salford (UK)
- ***Research to Support New Entrants to Public Airspace and Aircraft Noise Certification:***  
David Read, Christopher Roof: Volpe (USA)
- ***Audio signals of flying drones synthesized from laboratory recordings:***  
Kurt Heutschi Beat Ott, Thomas Nussbaumer, Peter Wellig: EMPA (Switzerland)
- ***Uncertainty quantification of the twin rotor in RPS variation:***  
Dongwook Kim, JeongWoo Ko, Soogab Lee: Seoul National University (Korea)
- ***Comparison of microphone configurations for drone noise measurements:***  
Per Rasmussen, Lars Winberg: GRAS (Denmark)
- ***An outlook on some technical issues related to UAM noise and annoyance:***  
Andrew Christian: NASA Langley (USA)
- ***Recommendations for research on the Noise impact of drones in an urban environment:***  
Roalt Aalmoes, Rui Roosien, Theo van Veen: NLR (The Netherlands)
- ***Methods for Providing Design Guidance to Improve Drone Sound using Community Input:***  
David Bowen: Acentech (USA)
- ***Assessment of environmental noise characteristics of innovative aerial vehicles:***  
Raphael Hallez, Nicolas Gass, Claudio Colangeli: Siemens Digital Industries Software (Belgium)
- ***Critical Review on the evolution of Unmanned Aerial Vehicles up to 2020:***  
Elena-Narcisa Burtea, Dan Radulescu, Andrei Cristian Mandoc, Stefan Gherasim: COMOTI (Romania)
- ***Methodology to simulate the sound and assess the acceptance of multiple rotor VTOL and Drones:***  
Patrick Boussard: ANSYS (France)
- ***UAM noise in complex urban environments: can we benefit from road and railway propagation methods?***  
Dirk Van Maercke, Julien MAILLARD, Jean-Baptiste CHENE : CSTB (France))
- ***Assessment of the environmental impact of drone noise in virtual flights:***

Xin Zhang, Haoyu Bian, Ryu Fattah, Siyang Zhong: Hong Kong University of Science and Technology (China)

- ***Achieving quiet flying passenger vehicles through numerical simulations, a LBM story:***  
Wouter van der Velden, Gianluca Romani, Ignacio Gonzalez-Martino, Damiano Casalino: Dassault Systemes (Germany)
- ***MOSQUITO Project a fast estimation approach for urban acoustic environment***  
Franck Cléro (ONERA), Eric Bouty (Safran), Julien Caillet (Airbus Helicopters), Ingrid Legriffon (ONERA), Patrice Malbequi (ONERA) / France
- ***Commercial Delivery Drone Routing: A Case Study of Noise Impacts:***  
Eddie Duncan, Kenneth Kaliski, Isaac Old, Erica Wygonik: RSG (USA)
- ***Views on Unmanned Aircraft Systems (UAS) Regulations and Standards:***  
Donald Scatta, Eric Elmore, Hua (Bill) He, Dave Read, Jim Hileman: Federal Aviation Administration (USA)
- ***Protection against aircraft noise during the operation of civil drones:***  
Annett Steindorf: German Environment Agency (Germany)
- ***ANSI/ASA Standards Activity on Measurement of UAS Noise:***  
Robert Hellweg, Kevin Herreman (USA)
- ***On Measuring the sound emission from drones :***  
Julia Treichel, Steffen Körper: UBA (Germany))
- ***Multi-rotor powered drone noise assessment:***  
Xin Zhang, Siyang Zhong: Hong Kong University of Science and Technology (China)
- ***Evaluation of noise exposure of drones using sonAIR- a case study in Switzerland:***  
Kornel Köstli, Jean Marc Wunderli: Federal Office Environment (Switzerland))
- ***Drone delivery and noise regulation in the Australian context:***  
Marion Burgess: University of New South Wales Canberra (Australia)
- ***Experimental analysis of noise emissions from different types of Unmanned Aerial Vehicle:***  
Elena-Narcisa Burtea, Dan Radulescu,, Raluca Maier, Andrei Cristian Mandoc, Marius Deaconu: COMOTI (Romania)
- ***Drone Delivery in Our Neighbourhoods: Community Engagement and Harnessing Feedback***  
Jesse Suskin, Nicole Schiffer: Wing (Australia)
- ***A Computational Fluid Dynamics Study of a Swept blade for UAV applications:***  
Young-Min Shim Michael J. Kingan: Riul Jung: Dotterel Technologies (New Zealand)
- ***Aeroacoustic and Aerodynamic study of small propeller with Serrated Trailing Edge for a quieter drone***  
Paolo Candeloro, Ranieri Emanuele Nargi, Edoardo Grande, Daniele Ragni, Tiziano Pagliaroli: Unicusano (Italy)

- ***Slipstream characteristics of Small-scale Propellers with Serrated Trailing Edge***  
Edoardo Grande, D. Ragni, T. Pagliaroli, P. Candeloro, R. E. Nargi, F. Avallone, T. Sinnige: TU Delft (The Netherlands) (
- ***'The Sound of the Drone Uprising' An Exploration into the Aero-acoustic Performance of Drone Blades***  
Josephine Nixon, Stephen Dance : London South Bank University (UK)
- ***Comparative study on noise produced by different geometries and materials present in propellers:***  
Andrei Christian Mandoc, Narcisa BURTEA, Marius DEACONU, Dan RADULESCU, Raluca MAIER, Stefan GHERASIM, Georgel VIZITIU : COMOTI (Romania))
- ***Multi-scale morphological effect on noise level and frequency characteristics of drone propellers:***  
Ryusuke Noda, Toshiyuki Nakata, Kei Senda, Hao Liu: Kyoto University (Japan))
- ***Interpolation based acoustic transfer function for drone noise simulation:***  
Hanbo Jiang, Xin Zhang: Hong Kong University of Science and Technology (China))
- ***Computational Aeroacoustic Investigation of Co-rotating rotors using LBM-VLES approach:***  
Shubham Shubham, Francesco Avallone, Edoardo Grande, Damiano Casalino : Delft University (The Netherlands)
- ***Drone Noise and the Influence of Support Structure:***  
Simon Watkins, Nicola Kloet, Xu Wang, Abdulghani Mohammed : RMIT (Australia)
- ***Experiments on UAV rotor noise at low Reynolds and low Mach numbers:***  
Helène Parisot-Dupuis, Romain Gojon, Thierry Jardin, Yeongmin JO, Nicolas Doue, Jean-Marc Moschetta : ISAE-SUPAERO (France))
- ***Noise reduction of a ducted propeller drone using novel passive acoustic treatments:***  
Marius Deaconu, Narcisa Burtea, Dan Radulescu: COMOTI (Romania)
- ***Drone Noise Control using Metamaterials:***  
Neha Lalit Kumar Sharma : University of Salford (UK)
- ***A pilot study of the noise characteristics and its control method for a drone:***  
Chen Yang, Bowen Cai, Shiqi Jia, Junqi Chen: Shanghai Jiao Tong University (China)
- ***Study on the aerodynamic noise source of the concept designed air taxi:***  
WanHO Jeon, Tae-gyun Lim, Kyoung-Keun Lee, Joo-ho Shim: CEDIC (Korea)
- ***CFD-CAA approach for sound generation and propagation in the UAV propeller with subsonic flow:***  
Serguei Timushev, Andrey Aksenov, Vladimir Gavriluk, Pyotr Moshkov, Alexey Yakovlev, Dmitry Klimenko: Moscow Aviation Institute (Russia )
- ***Chaotic and wavelet analysis of twin- and co-axial small scale rotor noise:***  
Tiziano Pagliaroli, Paolo Candeloro, Ranieri Emanuele Nargi, Luca Flamini, Luca Cucinella, Roberto Camussi, Roberto Pasta: Unicusano (Italy)

- ***Multicopter UAV Noise Prediction :***  
Austin Thai, Sheryl Grace: Boston University (USA)
- ***Experimental Investigation of Noise Characteristics of Rotors:***  
Koichi Yonezawa Eiji Shima, Toshiyuki Nakata and Hao Liu : Chiba Univ /CRIEPI (Japan)
- ***Experimental and Analytical Investigation of Contra-Rotating UAV Propeller noise:***  
Ryan McKay Michael J. Kingan: Sung Tyaek Go: Riul Jung: Dotterel Technologies (New Zealand)
- ***Quadcopter Acoustics and Performance Predictions using Very-Large Eddy Simulations:***  
Ignacio Gonzalez-Martino, Thomas Fernandez, Claire Bregman : Dassault Systèmes (France)
- ***Aerodynamic and aeroacoustic characteristics of multicopter configurations in variable RPM:***  
Jeongwoo Koo, Dong Wook Kim, Soogab Lee : Seoul National University (Korea)
- ***A semi-empirical approach for the prediction of aeroacoustic installation effects in multicopter drones:***  
Christophe Schram, Julien Christophe, Sophie Le Bras: Von Karman Institute (Belgium)
- ***The Quiet Drone Program at DST Group:***  
Alex Skvortsov, Leo de Yong : DST Group (Australia)
- ***Sound Localisation of Drones Using an Acoustic Camera:***  
Pablo Alloza : GFAI Tech (Spain)
- ***Development of a Noise Prediction Model for Multicopter UAVs:***  
Olivier Schwab, Kurt Heutschi, Marc Immer, Christian Induri, Jean Marc Wunderli: EMPA (Switzerland)
- ***UAS Sound Pressure Level Prediction using Panel Contribution Analysis:***  
David W Herrin, Gong Cheng, Jiazhu Li: University of Kentucky (USA) (n° 62)
- ***Drone Audition for Search and Rescue: Datasets and Challenges:***  
Antoine Deleforge: INRIA Nancy (France) )
- ***Proposal of Cognitive Drone Audition based on Cognitive Dynamic Systems:***  
Hiroshi Okuno Makoto Kumon, Kotaro Hoshiba, Kazuhiro Nakadai: Waseda University (Japan)
- ***Signal-to-Noise Ratio Enhancement Method for Improving Sound Source Detection of Drone- mounted Phased Microphone Array:***  
Yeong-Ju Go, Jong-Soo Choi: Chungnam National University (South Korea)
- ***Validation of the use of an on-board acoustic camera on a drone to detect people calling for help:***  
Alberto Izquierdo, Juan J. Villacorta, Lara del Val: University of Valladolid (Spain)
- ***Development of surface-processed low-noise propeller for search and rescue tasks with drone audition:***

Kotaro Hoshiba Ryusuke Noda, Toshiyuki Nakata, Hao Liu, Kei Senda, Kazuhiro Nakadai, Makoto Kumon, Hiroshi G. Okuno: Kanagawa University (Japan))

- ***Active Noise Cancellation of Drone Propeller Noise through Waveform Approximation and Pitch-Shifting:***  
Michael Narine, Ashwin Ashok: Georgia State University (USA)
- ***UAV detection from acoustic signature: requirements and state of the art:***  
Lucille Lamotte : MicrodB (France))
- ***Introducing Anti-Drone Solutions:***  
Lucas Le Bell: Cerbair (France)
- ***Algorithm for real world acoustic drone detection based on neural networks:***  
Christian Rollwage, Aike Ahrens, Mattes Ohlenbusch, Prof. Dr. Jörg Bitzer: Fraunhofer Institute (Germany)
- ***Acoustic Signature Analysis of an Unmanned Aerial Vehicle for Localization Using a Microphone Array:***  
Torea Blanchard : LAUM (France) Jean-Hugh THOMAS, Kosai RAOOF
- ***The research about the presence of drones inside closed environments:***  
Gino Iannace, Giuseppe Ciaburro, Amelia Trematerra: Univ della Campania (Italy)
- ***A Real-Time System for Joint Acoustic Detection and Localization of UAVs :***  
Martin Blass, Franz Graf: Joanneum Research (Austria)
- ***Flight path tracking and acoustic signature separation of swarm quadcopter drones using microphone array measurements:***  
Gert Herold Adam Kujawski, Christoph Strümpfel, Svenja Huschbeck, Maarten Uijt de Haag, Ennes SarradjX: TU Berlin (Germany))
- ***Two Dimensional Convolutional Neural Network Frameworks Using Acoustic Nodes for UAV:***  
Theoktisti Marinopoulou Anastasios Vafeiadis, Antonios Lalas, Christian Rollwage, Danilo Hollosi, Konstantinos Votis, Dimitrios Tzovaras: CERTH (Greece)
- ***Advances in Sound and Speech Signal Processing at the Presence of Drones:***  
Oliver Jokisch, Enrico Loesch, Ingo Siegert: Leipzig University (Germany)
- ***Measurement of the acoustic field generated by mini UAVs : Outdoor field trials for the acoustic identification and localization:***  
Eric Bavu, Aro Ramamonjy, Sébastien Hengy, Pierre Naz, Christophe Langrenne, Alexandre Garcia: CNAM Paris (France)