



**The 3rd International Workshop on Computational Neuroaesthetics (WCN 2022)
July 15-17, 2022, Padova, Italy (Both **online** and **offline** modes)**

Introduction

Beauty exists in our daily lives and aesthetic experience is fundamental for us to perceive and appraise the beauty around us. Neuroaesthetics, as a fascinating field, attracts many researchers to devote to unravel the neural mechanism in aesthetics. Advanced brain imaging and modulation techniques such as EEG, MEG, rTMS, and functional MRI could monitor neural activity changes in different brain regions with high temporal and spatial resolution, providing great opportunities on exploring the neural mechanism in aesthetics. With increasing data acquired from brain imaging techniques, new computational approaches and machine learning algorithms are eager to analyze the data and facilitate our understanding on Neuroaesthetics. In addition, computational modeling of neural mechanism in aesthetics is believed as a key to provide solutions on the challenge issues in Computational Aesthetics and machine creativity in artificial intelligence. Computational Neuroaesthetics, as an inter-discipline area, combines psychology, cognitive neuroscience, computational neuroscience, mathematics, and artificial intelligence together to lead a comprehensive understanding and modeling on mechanisms underlying Neuroaesthetics.

The WCN 2022 workshop will be co-located with the 2022 International Conference on Brain Informatics, July 15-17, 2022 in Padova, Italy. The goal of this workshop is to take a stock of the recent progress in neural mechanism and computational model of aesthetics, and provide a forum for the exchange of ideas from various disciplines including psychology, cognitive neuroscience, and artificial intelligence. We invite researchers and scientists to submit their high-quality and original works in Computational Neuroaesthetics.

[\[On-line Submission\]](#)

Topics of Interest

In the proposed workshop, research topics of interest include, but are not limited to:

- New models and theories of Neuroaesthetics
- Brain imaging studies of Neuroaesthetics
- Brain network and graph theory on Neuroaesthetics
- Machine learning and data analysis on Neuroaesthetics

- Computational modeling of Neuroaesthetics in aesthetic evaluation
- Computational modeling of Neuroaesthetics in machine creativity

Submission and Publication

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Similar to the main conference, there are 2 types of paper submissions that are possible:

Type I : Full Paper Submissions. Papers need to have up to 10 pages in LNCS format using our online submission system. All full-length papers accepted will be published by Springer as a volume of the series of LNCS/LNAI.

Type II : Abstract Submissions. Abstracts have a word limit of 500 words. Experimental research is particularly welcome. Accepted abstract submissions will be included in the conference program and will be published as a single, collective proceedings volume.

Workshop and Special Session full papers will be published at the same **BI proceedings at the Springer-Nature LNAI Brain Informatics book series**.

Accepted full papers will be selected to publish in a special issue at the Springer Open Access **Brain Informatics Journal (Springer-Nature)** upon significant revision.

Workshop Chairs

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