

## **Panel**

Entry ID: 187

Title: **Digital multisensorial analysis: possibilities and limits**

Description (250-300 words required)

In recent years, historians have increasingly turned their attention to the sensory perception of art and architecture, as evidenced by the latest work by Karmon. Structures are now seen not merely as products of an artist's taste, a patron's strategy, or contributions to decorative evolution, but as emotional experiences for their occupants. While details like decorative forms, artist names, or patron tastes might fade from historical memory, the sensorial experiences profoundly impact users, connecting actions or rituals with their context. Much of this recent research, which delves into sensorial emotions, relies on historical sources and focuses on individual senses like sound, smell, and touch, with less emphasis on taste and visual aspects such as lighting. However, in each of these areas, digital tools offer supplementary insights. For instance, previous analyses of lighting can now be revisited in conjunction with findings from acoustic or ventilation studies, as these experiences are intertwined. Utilizing these tools to analyze interior spaces not only provides new metrics for conservation but also yields data to deepen our understanding of how historical artists orchestrated spaces for artistic purposes.

This panel seeks to compile contributions that define the potential of these multifaceted approaches, aiming to establish a unified analytical framework for future collaboration. Additionally, it aims to identify current limitations, recognizing the need for discussions on calibration, the validation of multidisciplinary standards, and the tangible contributions of these tools to historical and heritage studies to enhance future outcomes.

### **Motivation:**

In the past decade, there has been a significant increase in studies focusing on the digital simulation of spaces and historical works regarding emotions. However, there has been a noticeable lack of discussion regarding the interconnectedness between these areas of research. It is imperative to define this interdisciplinary field through practical case studies, as this is essential not only for art and architectural historians but also for archaeologists and curators alike.

### **Target Audience:**

These discussions, while primarily aimed at academic historians, hold potential value for curators and private companies involved in museum renewals, offering insights to enhance visitor experiences and historical interpretation in exhibition design.

### **Keywords (3-5 keywords required):**

Multisensorial analysis, acoustic simulation, light simulation, Spatial analysis