## 33rd IAA SYMPOSIUM ON SPACE AND SOCIETY (E5) Contemporary Arts Practice and Outer Space: A Multi-Disciplinary Approach (3)

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## AIR AFTER SPACE: FROM THE INVISIBLE TO THE TANGIBLE

## Abstract

In a context of planetary urbanization, atmospheric pollution generated by transport, construction, heating and air conditioning have significant ecosystems impacts. Notably on lung and heart diseases, rising temperatures and vegetation growth. In this context, metabolic exchanges such as breathing underline the porous and co-constitutive boundaries between extractive practices, the living, and its environment. If it is impossible to be "outside the air" or circumscribe it within precise limits, its toxicity - something felt although invisible - asks pressing questions of socio-environmental justice and accessibility to a healthy environment.

Space research offers sophisticated technologies for tracking atmospheric pollution at high spatial resolution (eg. the global satellite constellation comprising GEMS, ESA and TEMPO). How do these technologies and the data they produce inspire and allow artists to make this invisible milieu tangible? To delve into this question, this presentation will address artistic projects that engage with the political ecologies of urban air in the context of rapid urbanization and global climate change (Graham, 2015).

Several practitioners invested the manufactured, monitored, encapsulated or boundary-less qualities of air. In architecture, R. Buckminster Fuller and Sohji Sadao (1960) or Haus-Rucker-Co (1967-1992) attempted to speculatively isolate humans from a toxic climate. In contemporary art, HeHe (2008), Janine Randerson (2012, 2018) and Amy Balkin (2018) have visualized global emanations data through still and moving images. Aligned with this trajectory, this presentation will discuss two case studies: the exhibition ON AIR by Thomas Saraceno (Palais de Tokyo, Paris, 2018) and the [Re]Capture project by Alice Jarry (Milieux Biolab, Concordia, 2022). 'ON AIR is an ecosystem in becoming [...] that makes manifest the forces and entities that float in the air, and their interactions with us: from CO2 to cosmic dust, from radio infrastructures to reimagined corridors of mobility" (Saraceno, 2021). [Re]Capture examines the socioenvironmental impact of particulate matter and explores 'filtration' as an interfacing strategy between materials, artistic and environmental science disciplines, and urban communities. Informed by satellite data, the project develops low-tech monitoring devices for citizen engagement and filtering membranes as porous structures for the built environment.

Materializing the microscopic invisibility of atmospheric pollution and the macroscopic dimension of socio-political and health, these artworks will critically enter in dialogue to address air as a biological, geological, political and anthropogenic assemblage that unfolds across different timelines and scales; And examine how they induce new sensory and critical experiences that reorient this invisible milieu within new ecological imaginaries.