

**MIT Atmospheric Sciences Seminar Presents:** 

## Plant Based Ice Nuclei from Trees and Berries

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Wednesday August 9<sup>th</sup> , 12:00 – 1:00 PM / Room 54-915

Macromolecular ice nuclei have for a long time been neglected by atmospheric scientists. However, plants are known by biologists to produce ice nuclei as a part of their low-temperature survival strategy. In the past, it has been shown by us that birch pollen exhibit ice nucleation active macromolecules at their surface. These molecules can be washed off from the pollen grains and nucleate ice independently.

Only recently, we found the same ice nuclei also on secondary and primary wood and on leaves of birch trees. However, also other plants such as berry bushes produce similar molecular ice nuclei. The question remains if these biological ice nuclei can be dispersed through the atmosphere and can impact cloud glaciation processes.