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Hamburg Aerospace Lecture Series
Hamburger Luft- und Raumfahrtvorträge

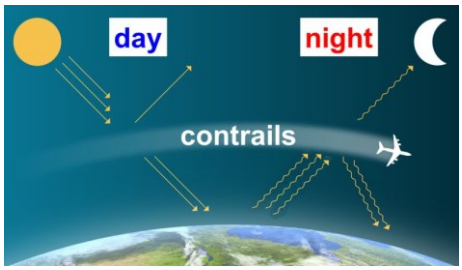
DGLR in cooperation with the RAeS, VDI, ZAL and HAW Hamburg invites you to a lecture

Contrail Management – Now!

Prof. Dr.-Ing. **Dieter Scholz**, MSME, HAW Hamburg

Date: **Thursday, 20 June 2024, 18:00 CET**

Location: **HAW Hamburg, Berliner Tor 5, Hörsaal 01.10**



Flying is booming and with it the CO2 emissions. It is is not easy to decarbonize aviation. Whether electric drives, e-fuels, or green hydrogen, so far there is **no convincing** climate-friendly option for **propulsion in air transport**. And now? In addition to **drastic flight restrictions**, there is another way forward. Flights just need to be rerouted to **fly a little higher or lower**. Why? Large passenger and cargo jets are flying at an altitude of around 11000 m. In these regions water vapor condenses with soot from the engine exhaust to ice crystals forming **contrails behind the aircraft**. They can remain visible for many hours, when humidity is high. Especially at dawn, dusk and at night contrails are warming, because they act like panes of glass in a greenhouse (see picture). **CO2** from aircraft fuel accounts for only **one third** of the warming effect measured in equivalent CO2. In contrast, **contrails** can cause **more than half** of the equivalent CO2. Experts in various fields of aviation explain unanimously that **contrail management could start now!** How is it done? Who knows what? Who is prepared? Who is against it?

Picture top, right based on © https://contrails.org. Other pictures © Scholz, CC BY-NC-SA.

Above: Schloßplatz, Dresden, Germany.

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