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**Interfacial Instabilities in Evaporating Drops** ROSS MOFFAT, KHELLIL SEFIANE, University of Edinburgh, OMAR MATAR, Imperial College, UOE COLLABORATION, IC COLLABORATION — We study the effect of substrate thermal properties on the evaporation of sessile drops of various liquids. An infra-red imaging technique was used to record the interfacial temperature. This technique illustrates the non-uniformity in interfacial temperature distribution that characterises the evaporation process. Our results also demonstrate that the evaporation of methanol droplets is accompanied by the formation of wave-trains in the interfacial temperature field; similar patterns, however, were not observed in the case of water droplets. More complex patterns are observed for FC-72 refrigerant drops. The effect of substrate thermal conductivity on the structure of the complex pattern formation is also elucidated.

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