562 Concentrations of BFRs, PFRs and PFASs in Indoor Air and Dust from Four European Cities D. Drage, University of Birmingham / School of Geography, Earth & Environmental Sciences; S.J. Harrad, The University of Birmingham; G. Poma, University of Antwerp, Toxicological Center / Toxicological Center; C. Christia, University of Antwerp; A. Covaci, University of Antwerp / Toxicological Center; S. Brandsma, VU University Amsterdam / Environment & Health; P. Cenijn, VU Amsterdam / Environment and Health; I. Van der Veen, VU University Amsterdam / Environment & Health; M. Lamoree, VU University, Department Environment & Health / Department Environment & Health; P. Leonards, VU University, Institute for Environmental Studies / Department of Environment and Health; C. de Wit, Stockholm University / Environmental Science and Analytical Chemistry; F. Tao, Stockholm University ACES; O. Sandblom, Stockholm University / Department of Environmental Science and Analytical Chemistry; M.M. Plassmann, J.P. Benskin, Stockholm University / Department of Environmental Science and Analytical Chemistry ACES; N. Wemken, National University of Ireland Galway / School of Physics & the Ryan Institute; M. Coggins, National University of Ireland Galway. **Introduction** Contact with indoor air and dust containing brominated flame retardants (BFRs), organophosphate flame retardants (PFRs), and perfluoroalkyl substances (PFASs) is an important human exposure pathway. This study tests the hypothesis that recent restrictions on such chemicals has led to reductions in their concentrations in indoor environments and iincreased levels of substitute chemicals. **Sampling and Analysis** Between December 2016 and February 2017, samples of indoor floor dust were taken from homes in: Amsterdam, Netherlands (n=11), Antwerp, Belgium (n=20), and Galway, Ireland (n=10). Dust samples were also collected from offices in Stockholm, Sweden (n=10) and Amsterdam (n=10). Indoor air samples were collected from the same 10 Galway homes and Stockholm offices. PBDEs, HBCDDs, TBBP-A, and a range of emerging BFRs (EFRs) and PFRs were determined in Galway air samples and in all dust samples, with the exception of those from Amsterdam for which only EFR data are available. In addition, concentrations of a number of PFASs were determined in dust from homes in Amsterdam (n=9), Antwerp (n=6), and Galway (n=10), dust from offices in Amsterdam (n=9), and Stockholm (n=10), as well as in air from Galway homes and Stockholm offices. PBDEs, EBFRs, and PFRs were determined using GC-MS, with LC-MS used to measure HBCDDs, TBBP-A, and PFAS. **Conclusions** Our results confirm the ubiquitous presence of BFRs, PFRs, and PFASs in European homes and offices and the continued existence of substantial differences in contamination levels and patterns between different EU states. Median concentrations of BDE-209, HBCDD, and DBDPE are markedly higher in Galway house dust than elsewhere. This may stem from Ireland applying flame retardancy regulations to soft furnishings that are similar to those in the UK, and differ to those applied in other EU countries. PFRs predominate in samples from Antwerp, Amsterdam, and Stockholm, and are at a similar level to BDE-209, HBCDD, and DBDPE in Galway. Offices in Amsterdam display the highest median concentrations of PFOA, PFOS, PFHxS, and PFBS. PFBS predominates amongst these PFAS in all but Stockholm office dust. This may indicate increased use of this short chain PFAS (and/or its precursors) in response to restrictions on PFOS and PFHxS. Likewise, the elevated DBDPE concentrations in Galway homes implies its increased use in response to restrictions on the use of Deca-BDE of which BDE-209 is the major component.