Temperature dependence of angle-resolved photoemission of the crystalline topological insulator \( \text{Pb}_{1-x}\text{Sn}_x\text{Se}(111) \) OLIVER RADER, PARTHA S. MANDAL, Helmholtz-Zentrum Berlin, GUNther SPRINGHOLZ, GUNTHER BAUER, VALENTYN VOLOBUIEV, Johannes-Kepler-Universität Linz, ANDREI VARYKHALOV, EVANGELOS GOLIAS, JAIME Sánchez-BARRIGA, Helmholtz-Zentrum Berlin — The system \( \text{Pb}_{1-x}\text{Sn}_x\text{Se} \) is a topological insulator protected by mirror symmetry. Angle-resolved photoemission investigations have so far been concentrating on (100) surfaces of bulk single crystals. Here, we systematically study (111) epitaxial films under variation of the Sn concentration (10