1154-57-324 **Jesús A. Álvarez López*** (jesus.alvarez@usc.es), Department/Institute of Mathematics, 15782 Santiago Compostela, Spain, **Yuri A. Kordyukov** (yurikor@matem.anrb.ru), Institute of Mathematics, 112 Chernyshevsky str., Ufa, 450008, Russia, and **Eric Leichtnam** (ericleichtnam@math.jussieu.fr), Institut Mathématiques de Jussieu-PRG, CNRS, Batiment Sophie Germain (bureau 740), Case 7, 75205 Paris, France. *A trace formula for foliated flows.*

Let $\mathcal{F}$ be a smooth codimension one foliation on a compact manifold M. A flow ϕ^t on M is said to be foliated if it maps leaves to leaves. If moreover the closed orbits and preserved leaves are simple, then there are finitely many preserved leaves, which are compact, forming a compact subset M^0, and a precise description of the transverse structure of $\mathcal{F}$ can be given. A version of the reduced leafwise cohomology, $\overline{H}I(\mathcal{F})$, is defined by using distributional leafwise differential forms conormal to M^0. The talk will be about our progress to define distributional traces of the induced action of ϕ^t on $\overline{H}^r I(\mathcal{F})$, for every degree r, and to prove a corresponding Lefschetz trace formula involving the closed orbits and leaves preserved by ϕ^t. The formula also involves a distributional version of the η-invariant of M^0. This kind of distributional trace formula was conjectured by Christopher Deninger, and it was proved by the first two authors when $M^0 = \emptyset$. (Received August 31, 2019)