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**Yongjin Lu\*** (y1u@vsu.edu). *Pullback dynamics of non-autonomous Navier-Stokes equation on 2D Lipschitz-like domains.*

We study the tempered pullback dynamics of non-autonomous Navier-Stokes equation with a non-homogeneous boundary condition on 2D Lipschitz-like domains. We establish the existence of a minimal pullback attractor with respect to a universe of tempered sets with the presence of a pullback translation bounded time-dependent external force. We then give estimates on the finite fractal dimension of the pullback attractor expressed in terms of the Reynold and Grashof numbers. The last result we establish pertains to the upper semi-continuity of the pullback attractors when the external force is perturbed from a stationary force by a time-dependent perturbation. Some of the key methods that we used to establish the results include trace formula and the construction of a background flow function. (Received August 09, 2020)