1139-53-31 **David N Pham*** (dnpham@qcc.cuny.edu). *The Lie groupoid analogue of a symplectic Lie group.* Preliminary report.

A symplectic Lie group is a Lie group with a left-invariant symplectic form. Its Lie algebra structure is that of a quasi-Frobenius Lie algebra. In this talk, we identify the groupoid analogue of a symplectic Lie group. We call the aforementioned structure a *t-symplectic Lie groupoid*; the "*t*" is motivated by the fact that each target fiber of a *t*-symplectic Lie groupoid is a symplectic manifold. For a Lie groupoid $\mathcal{G} \rightrightarrows M$, we show that there is a one-to-one correspondence between quasi-Frobenius Lie algebroid structures on $A\mathcal{G}$ and *t*-symplectic Lie groupoid structures on $\mathcal{G} \rightrightarrows M$. (Received January 10, 2018)