

**PSEUDODIFFERENTIAL MULTI-PRODUCT REPRESENTATION OF THE
SOLUTION OPERATOR OF A PARABOLIC EQUATION**

By using a time slicing procedure, we represent the solution operator of a second-order parabolic pseudodifferential equation on \mathbb{R}^n as an infinite product of zero-order pseudodifferential operators. A similar representation formula is proven for parabolic differential equations on a compact Riemannian manifold. Each operator in the multi-product is given by a simple explicit Ansatz.

This is joint work with H. Isozaki (Tsukuba, Japan)