

---

**NIELS GRONBAEK**, Department of Mathematics, University of Copenhagen, Universitetsparken 5, DK-2100 Copenhagen Ø, Denmark

*The  $L_1(H)$ -module  $L_1(G)_H$*

Let  $G$  be a locally compact group, and let  $H$  be a closed subgroup. Identifying Haar measure on  $H$  with an  $H$ -supported Borel measure on  $G$ , the Banach space  $L_1(G)$  is naturally a right module over the convolution algebra  $L_1(H)$ , denoted  $L_1(G)_H$ . We prove that  $L_1(G)_H$  is a strictly flat generator of the category of essential right  $L_1(H)$ -modules. This result is the key to understand the representations of  $G$  in terms of the representations of its closed subgroups. As an illustration we give a characterization of the strongly continuous 1-parameter group actions which are induced from some doubly power bounded operator.