

Given a unital subalgebra  $B$  of a  $\text{II}_1$  factor  $M$ , define the groupoid normalizers  $\mathcal{GN}(B)$  of  $B$  in  $M$  to be all partial isometries  $v \in M$  with  $vBv^*$ ,  $v^*Bv \subseteq B$ . We show that when  $B'_i \cap M_i = \mathcal{Z}(B_i)$ ,  $i = 1, 2$ , then

$$\mathcal{GN}(B_1)'' \overline{\otimes} \mathcal{GN}(B_2)'' = \mathcal{GN}(B_1 \overline{\otimes} B_2)''.$$

This is joint work with Roger Smith, Stuart White, and Junsheng Fang.