## The projection from full $C^*$ -algebra associated to free group onto the span of generators

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We show that both the completely bounded norm and the usual norm of the natural projection  $P_n$  from the full  $C^*$ -algebra  $C^*(F_n)$  associated to the free group  $F_n$  onto the span of generators have  $\sqrt{n}$  for their asymptotic orders.