GISELA TARTAGLIA, Universidad Nacional de La Plata
The Farrell-Jones conjecture for Haagerup groups and $\mathcal{K}$-stable coefficients.

A celebrated theorem of Higson and Kasparov says that if G is Haagerup group then the topological K-theory assembly map (the Baum-Connes assembly map) with coefficients in a G-C^*-algebra A

$$H_*^G(\underline{EG}, K^{\mathrm{top}}(A)) \to K_*^{\mathrm{top}}(C_r^*(G, A))$$

is an isomorphism. Here $C_r^*(G, A)$ is the reduced C^*-algebra crossed product. Thus the Higson-Kasparov theorem establishes the Baum-Connes conjecture for Haagerup groups. In joint work with G. Cortiñas we have shown that if G is Haagerup, $\mathcal{K}$ is the ideal of compact operators, I is a K-excisive ring, A a G-C^*-algebra and $B = I \otimes_{\mathbb{Z}} (A \otimes_{\min} \mathcal{K})$ then the algebraic K-theory assembly map (the Farrell-Jones assembly map)

$$H_*^G(\underline{EG}, K(B)) \to K_*(B \rtimes G)$$

is an isomorphism. Here $\rtimes$ is the algebraic crossed product. Thus the latter result establishes Farell-Jones conjecture with $\mathcal{K}$-stable coefficients. The talk will review this result and report on our current project with Cortiñas and Willett to partly extend this to rings of coefficients which are stable under the ideal of trace-class operators.