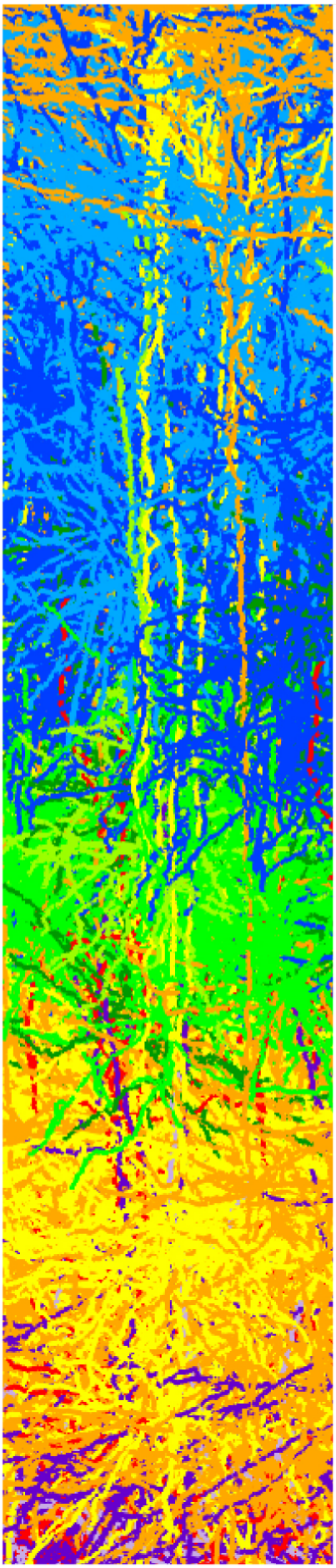
UNIVERSITÄT BONN

Neuroscience Lecture

Bonn Center of Neuroscience



Glutamatergic synaptic input to glioma cells drives brain tumour progression

Thomas Kuner, Prof. Dr.

University of Heidelberg

The lecture will present a direct communication channel between neurons and glioma cells in different disease models and human tumours: functional bona fide chemical synapses between presynaptic neurons and postsynaptic glioma cells. These neurogliomal synapses show a typical synaptic ultrastructure, are located on tumour microtubes, and produce postsynaptic currents that are mediated by AMPA receptors. Neuronal activity generates synchronised calcium transients in glioma networks and drives glioma cell proliferation and invasion. Both are reduced by genetic and pharmacological AMPA receptor blockade. Our findings establish a novel concept in glioblastoma biology and open new therapeutic avenues.

November 27th, 2019, 4.15 pm

Großer Hörsaal Neurologie

Find more talks

If you would like to meet with the speaker, please contact:

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