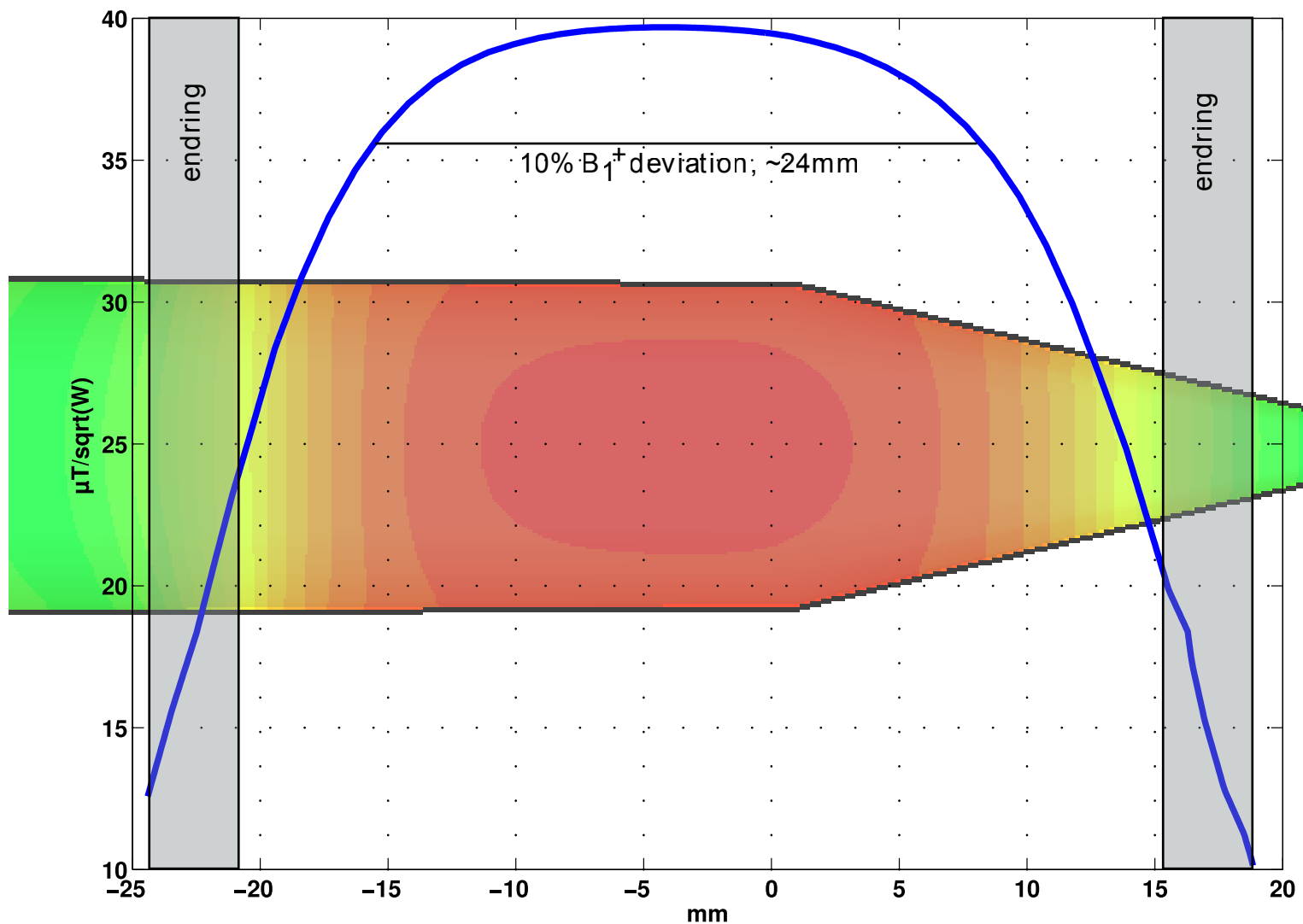


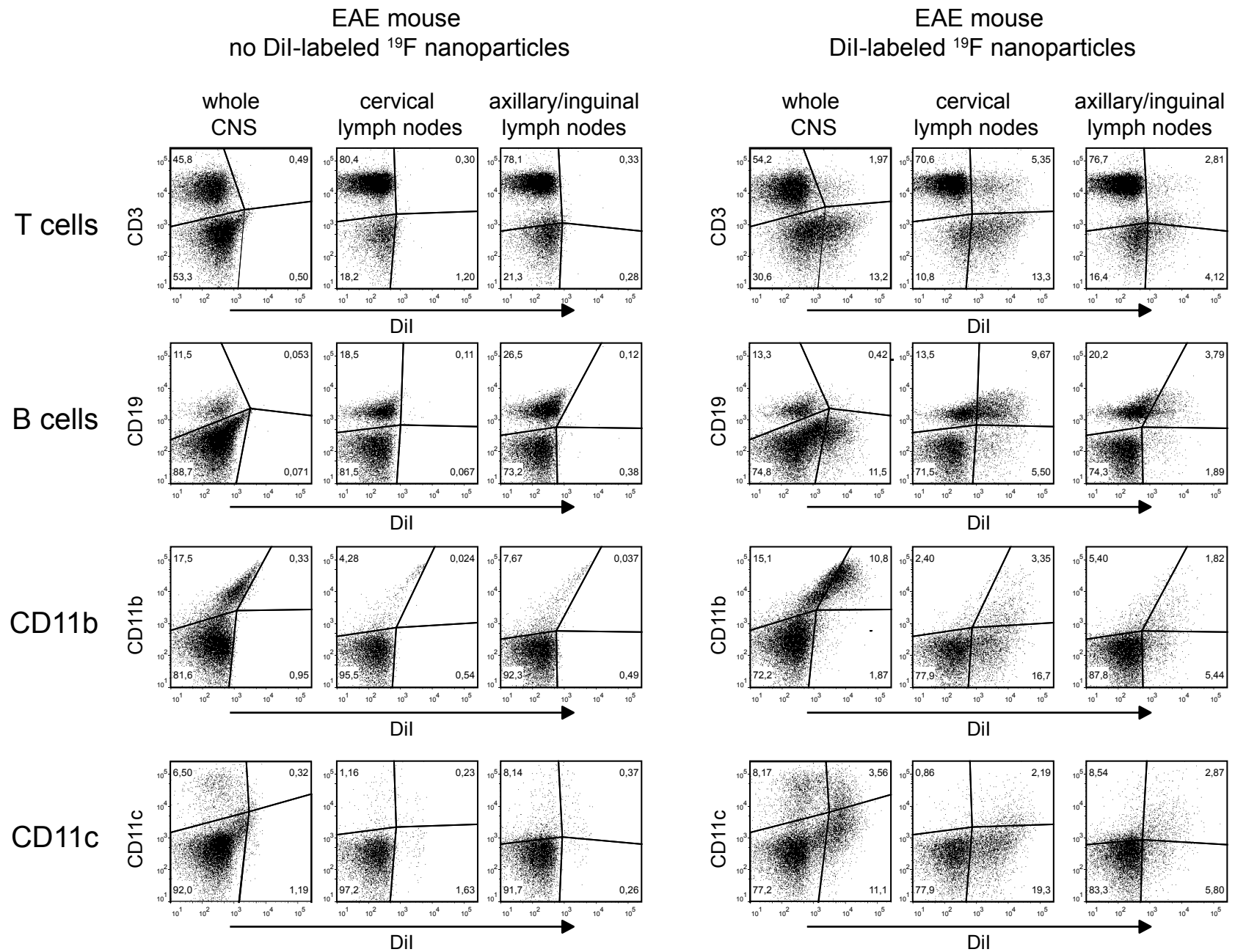
Visualizing Brain Inflammation with a Shingled-Leg

Radio-Frequency Head Probe for $^{19}\text{F}/^1\text{H}$ MRI

Helmar Waiczies^{*,1,2}, Stefano Lepore^{1,2}, Susanne Drechsler^{1,2}, Fatimunnisa Qadri^{2,3},
Bettina Purfürst⁴, Karl Sydow⁵, Margitta Dathe⁵, André Kühne⁶, Tomasz Lindel⁶,
Werner Hoffmann⁶, Andreas Pohlmann¹, Thoralf Niendorf^{1,2}, Sonia Waiczies^{1,2}



Supplementary Figure 1. B^+ -Field Distribution of the proton channel for the $^{19}\text{F} / ^1\text{H}$ RF Birdcage Probe along the z -axis. A line plot (blue curve) of the B^+ -field through the center of the phantom tube along the z -axis of the probe, overlaid with the B^+ -field distribution of the center slice with the same spatial orientation and scale of the line plot. The grey bars on either side depict the location of the two end rings of the birdcage. About 65 % of the usable volume of the birdcage resonator has a B^+ -field deviation of less than 10 % (black horizontal line).



Supplementary Figure 2. Uptake of ¹⁹F-rich and DiI-labeled Nanoparticles by different Immune Cell Populations in CNS and Secondary Lymphoid Organs of EAE Mice. Shown are fluorescence of different immune cell stainings (CD3⁺ T cells, CD19⁺ B cells, CD11b⁺ and CD11c⁺ monocytes/macrophages) and DiI in EAE mice administered with (right panel) or without (left panel) DiI-labeled ¹⁹F nanoparticles.