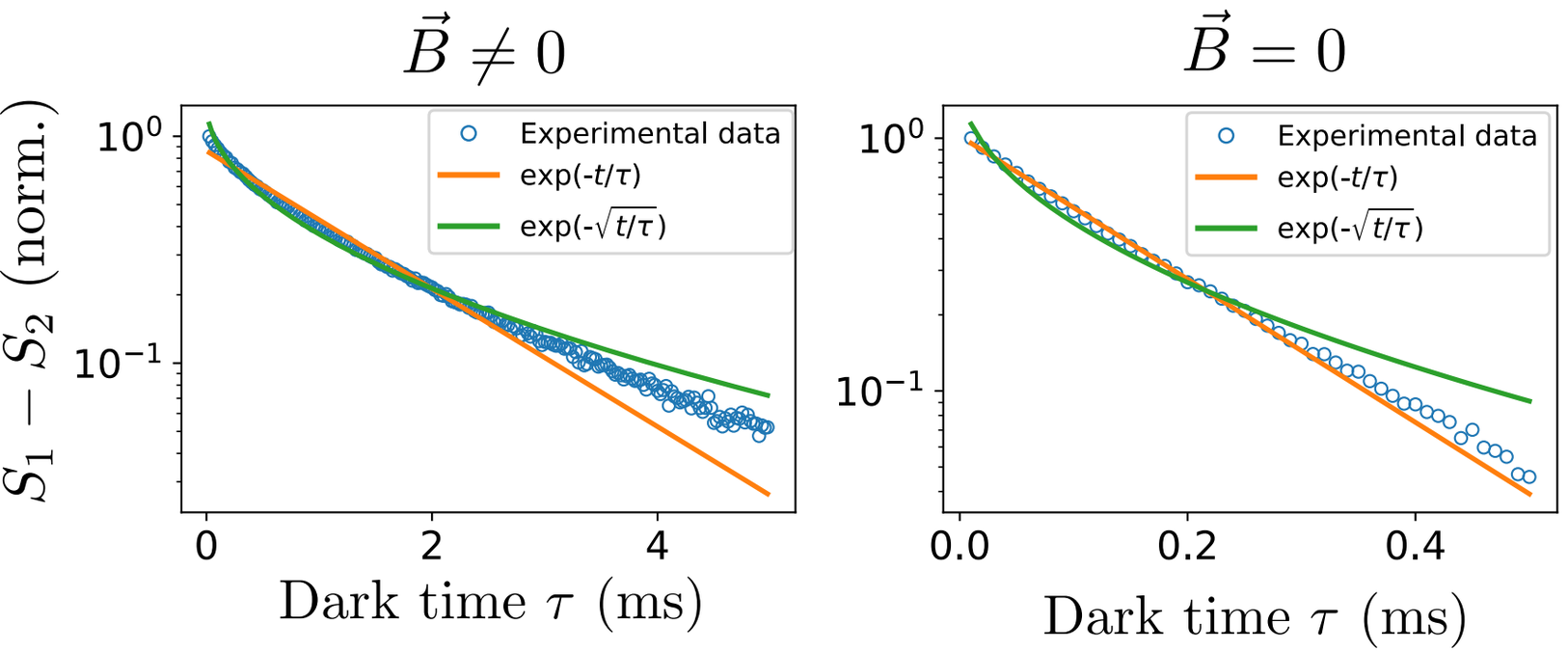
$\Gamma_1^{\mathrm{dd}}(\mathbf{B})$	Theory	Experimental
random $\mathbf{B}$ (1 class)	Γ_0^{th}	$1.53 \pm 0.04\ \mathrm{ms}^{-1} \equiv \Gamma_0^{\mathrm{exp}}$
$\mathbf{B} \in \{110\}$ (2 classes)	$10.0\ \Gamma_0^{\mathrm{th}}$	$5.2 \pm 0.1\ \Gamma_0^{\mathrm{exp}}$
$\mathbf{B} \in \{100\}$ (2 classes)	$7.24\ \Gamma_0^{\mathrm{th}}$	$4.2 \pm 0.1\ \Gamma_0^{\mathrm{exp}}$
$\mathbf{B} \parallel \langle 111 \rangle$ (3 classes)	$28.4\ \Gamma_0^{\mathrm{th}}$	$11.6 \pm 0.4\ \Gamma_0^{\mathrm{exp}}$
$\mathbf{B} \parallel \langle 100 \rangle$ (4 classes)	$42.8\ \Gamma_0^{\mathrm{th}}$	$14.1 \pm 0.5\ \Gamma_0^{\mathrm{exp}}$
$\mathbf{B} = 0$ (4 classes)	$104\ \Gamma_0^{\mathrm{th}}$	$19.9 \pm 0.8\ \Gamma_0^{\mathrm{exp}}$

Overestimation of the relaxation rate



Exponential lifetime (still dipole-dipole limited)

Improvement of the model:

- Saturation of the fluctuators (non-Markovian)
- NV-NV spin diffusion