ERRATA

Erratum to: Spin Diffusion in Liquid ^3He Confined in Planar Aerogel

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Received August 6, 2020; revised August 6, 2020; accepted August 6, 2020

DOI: 10.1134/S0021364020160110

In our mentioned work, we expressed surprise by an unexpectedly high magnitude of D_D^{xx} . This value turned out to be incorrect due to a mistake discovered later: *real* spherical harmonics $Y_{lm}(\hat{\mathbf{p}})$ are *not* eigenfunctions¹ of z -axis rotations. In-plane diffusion is determined by $m_1 = m_2 = 1$ “slice” of the collision operator matrix. The slice for the planar aerogel, formed by the strands uniformly distributed in the xy plane, is given by the arithmetic mean of $m_1 = m_2 = 1$ and $m_1 = m_2 = -1$ elements of the matrix computed for a nematic aerogel whose strands are aligned with

an arbitrary vector $\mathbf{n}$ in the xy plane. This can be seen from the identity

$$\begin{aligned} & \int h(\phi - \alpha, \phi' - \alpha) \cos \phi \cos \phi' \frac{d\alpha}{2\pi} d\phi d\phi' \\ &= \frac{1}{2} \int h(\phi, \phi') \cos(\phi - \phi') d\phi d\phi'. \end{aligned}$$

Numerical evaluation results in $U_D^1 = 0.2529$ and Eq. (11) should read

$$D_D^{xx} = 0.265 \left(1 + F_0^a\right) \frac{v_F d}{v}. \quad (11)$$

Predicted diffusion anisotropy is $D_D^{xx}/D_D^{zz} = 1.41$, and for our aerogel parameters $D_D^{xx} = 0.00346 \text{ cm}^2/\text{s}$.

The original article can be found online at <https://doi.org/10.1134/S0021364018230017>

¹ These functions contain $\cos m\phi$ for $m > 0$ and $\sin m\phi$ for $m < 0$.