Erratum: *CP* violation in hadronic τ decays [Phys. Rev. D 75, 074007 (2007)]

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In Ref. [1] we examined *CP* violation in hadronic τ decays, focusing on the modes $\tau \to V\pi\nu_\tau$, with $V = \omega, \rho, a_1$. Our numerical calculations examined the ω and a_1 cases. We also made comments regarding the ρ case. The hadronic current for the decay $\tau(l) \to V(q_1)\pi(q_2)\nu_\tau(l')$ may be written as

$$\begin{aligned} J^\mu &= \langle V(q_1)\pi(q_2)|H^\mu|0\rangle \\ &= F_1(Q^2)(Q^2\epsilon_1^\mu - \epsilon_1 \cdot q_2 Q^\mu) + F_2(Q^2)\epsilon_1 \cdot q_2\left(q_1^\mu - q_2^\mu - Q^\mu \frac{Q\cdot(q_1-q_2)}{Q^2}\right) + iF_3(Q^2)\varepsilon^{\mu\alpha\beta\gamma}\epsilon_{1\alpha}q_{1\beta}q_{2\gamma} \\ &\quad + F_4(Q^2)\epsilon_1 \cdot q_2 Q^\mu. \end{aligned} \tag{1}$$

In Ref. [1] we claimed that, for the case $V = \rho$, this current was expected to be dominated by the F_3 term. Thus, we expected that this case could lead to a triple product asymmetry, but not to a polarization-dependent asymmetry. An explicit calculation in Ref. [2] indicates that the F_3 term is absent for $\tau \to \rho\pi\nu_\tau$, which would imply that the triple product asymmetry for this case would be zero (although the polarization-dependent asymmetry could be non-negligible).

[1] A. Datta, K. Kiers, D. London, P. J. O'Donnell, and A. Szynkman, Phys. Rev. D **75**, 074007 (2007).
[2] H. Davoudiasl and M. B. Wise, Phys. Rev. D **53**, 2523 (1996).

