the bulk bands for an inverse of the phonon mass of 0.015 f is shown in Fig. 6(a), where the magnetic resonance is lower than the dielectric resonance. The effects of a magnetic resonance above the dielectric resonance, with $0.009f$, are shown in Fig. 6(b). Only band overlap and intersections are affected. Note a consequence of this for the surface modes. In the case where the magnetic resonance is below the dielectric resonance, have a broader range in wavevector (see Fig. 6(a)) compared to the case where the magnetic resonance is above the dielectric resonance (in Fig. 6(b)).

V. CONCLUSIONS

Dispersion relations for a material having linear magnetoelectric coupling have been calculated for tranverse electric polariton modes. Effects associated with spin canting are considered. The polarisation and weak ferromagnetism are parallel to the surface, and the antiferromagnet magnetisations are out of plane. We find surface modes associated with the weak ferromagnetism that are non-reciprocal with respect to propagation direction, such that $\omega\left(\vec{k}\right) \neq \omega(-\vec{k})$. For sufficiently large magnetic fields, or different material parameters, surface modes may also exist in the magnetostatic region, with $k \gg \omega/c$. Application of static magnetic field can be used to modify the middle bulk band frequencies

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