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*The writhe of a polygon on the hexagonal closed packing.* Preliminary report.

We discuss the writhe of a self-avoiding polygonal curve on the hexagonal closed packing (HCP), a space group where the arrangement at each vertex has twelve nearest-neighbors. The writhe is computed as the average of weighted projected writhing numbers of the polygon in a few directions. These directions are determined by the HCP geometry, the weights are determined by areas of regions on the unit 2-sphere, and the regions are formed by the tangent indicatrix to the polygonal curve. The sphere partition given by the indicatrix is composed of 55 regions of 8 different types, including spherical triangles, quadrilaterals, rhombus, and a hexagon. (Received December 05, 2011)