1135-F1-3101   **David A Reimann*** (`dreimann@albion.edu`), Math/CS Department, Albion College, 611 E. Porter St., Albion, MI 49224, and **Antoniu Fodor**. *Panoramic Photographic Polyhedral Pavilions.*

Conventional cameras view a small solid angle, limiting the both the field of view and projective distortion. However, multiple individual pictures are need to have full spherical coverage. Cameras that can directly take spherical panoramic photos, such as the Ricoh Theta S, have become available as relatively inexpensive consumer products. Unlike a traditional camera, this camera has two hemispherical lenses, allowing it to see simultaneously in every direction around the camera. These cameras produce an equirectangular projection, where each latitude row has the same number of pixels, which has severe distortion at the poles. One approach to hardcopy display is to map the image onto the surface of a small polyhedron, such as a Platonic or Archimedean solid, which reduces the distortion. Using such polyhedra resembles the process artist Dick Termes uses for painting on a sphere, which he calls a Termesphere. These techniques force the viewer to see the world inside-out. Our work maps the spherical photo to the inside of a large polyhedra to create a miniature pavilion which can be entered for a personal panoramic experience. (Received September 26, 2017)