ON SOME NEW TYPES AND KINDS OF POLYHEDRA NON-INSCRIBABILITY

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Types of polyhedra are studied that are non-inscribable in the spherical shell. A general sufficient condition is formulated. Employing it, a large class of polyhedra is proved to be spherical-shell non-inscribable in addition to those non-inscribable in the sphere. Several illustrations of applying the sufficient condition proved (as well as the proof techniques used) are presented on the examples of spherical-shell non-inscribability calculation for particular polyhedra types. In the second part of the paper, the relationship between (non-) inscribability in the spherical shell and (non-) inscribability in the sphere is focused and traced more closely. In consequence, a new kind of (non-) inscribability is defined, that interpolates these two ones.