Spinning the Gleason-Kahane-Żelazko and Kowalski-Słodkowski theorems

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We shall present two recent spherical variants of the Gleason-Kahane-Żelazko and Kowalski-Słodkowski theorems with different applications to the study of weak-2-local isometries on uniform algebras and Lipschitz algebras. Among the applications, we present some positive solutions to problems posed by O. Hatori, T. Miura, H. Oka and H. Takagi and by L. Molnár on 2-local isometries.