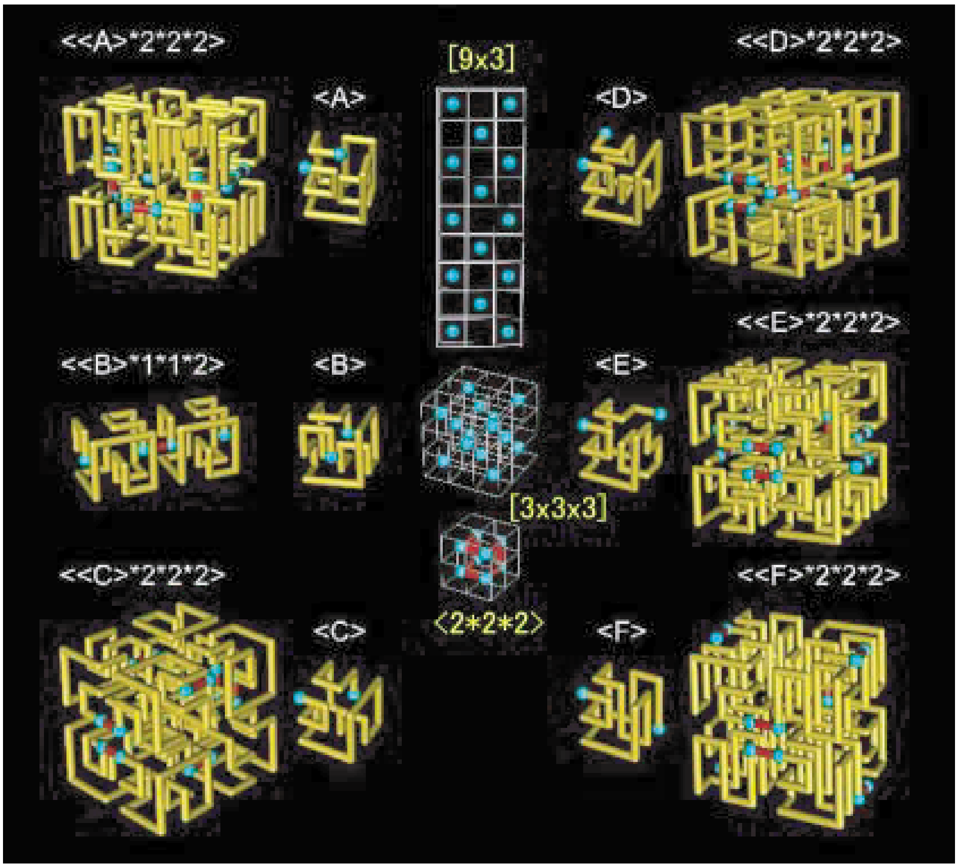

Fig. 3. Serial polyaxis <3∗3∗3> and recursive serial polyaxis <<Module>∗2∗2∗2> for modules <A> to <F>. Spheres in odd-numbered units in [9 × 3] and [3 × 3 × 3] are start/end points of the space-filling serial polyaxis. The space-filling serial polyaxis <2∗2∗2> is a mother pattern for a recursive serial polyaxis.

5. Serial Polyaxis by Nested Combination

A nested combination of <<2∗2∗2>/<3∗3∗3>> serial polyaxis can be constructed such that a <2∗2∗2> serial polyaxis is obtained in a <3∗3∗3> serial polyaxis, where the start and end points are connected (Fig. 4; IIIa + IIIb → IIIc). A nested combination of <<2∗2∗2>/<3∗3∗3>> serial polyaxes can also be constructed from a <<4∗4∗4>2∗2∗2> serial polyaxis as a <<3∗3∗3>3∗3∗3> serial polyaxis with start and end points connected (Fig. 4; IIe → IIIe ← Ie). This approach is applicable for any nested combination of serial polyaxes <<p∗q∗r>/<l∗m∗n>>. Any combination of modules is possible, affording a nested combination serial polyaxes. For example, there are 6 patterns for the <3∗3> module (Fig. 4; Ia).