

- bonds;
- crystals through atmosphere.







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MIT PRIMES-USA

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d Francis postulated that small viruses are ins that are arranged according to symmetry. biologists and other scientists to contact e insight on possible symmetries the viruses could cause to the viruses, in terms of

ed as helical, icosahedral, or irregular shape r capsid

described by their diameter and pitch (the ach complete turn of the helix). The number ict of the number of protein subunits per axial rise per subunit(p).

nave 5-fold, 3-fold, and 2-fold axes

y which measure approximate portions of the are determined based on line distances from



is constructed from N_{cap} capsomers. edge length of pentasymmetrons (pentagonal symmetry), iangular symmetry), T = triangulation number, h, k integers. $= 20N_{TS} + 12N_{PS}$



