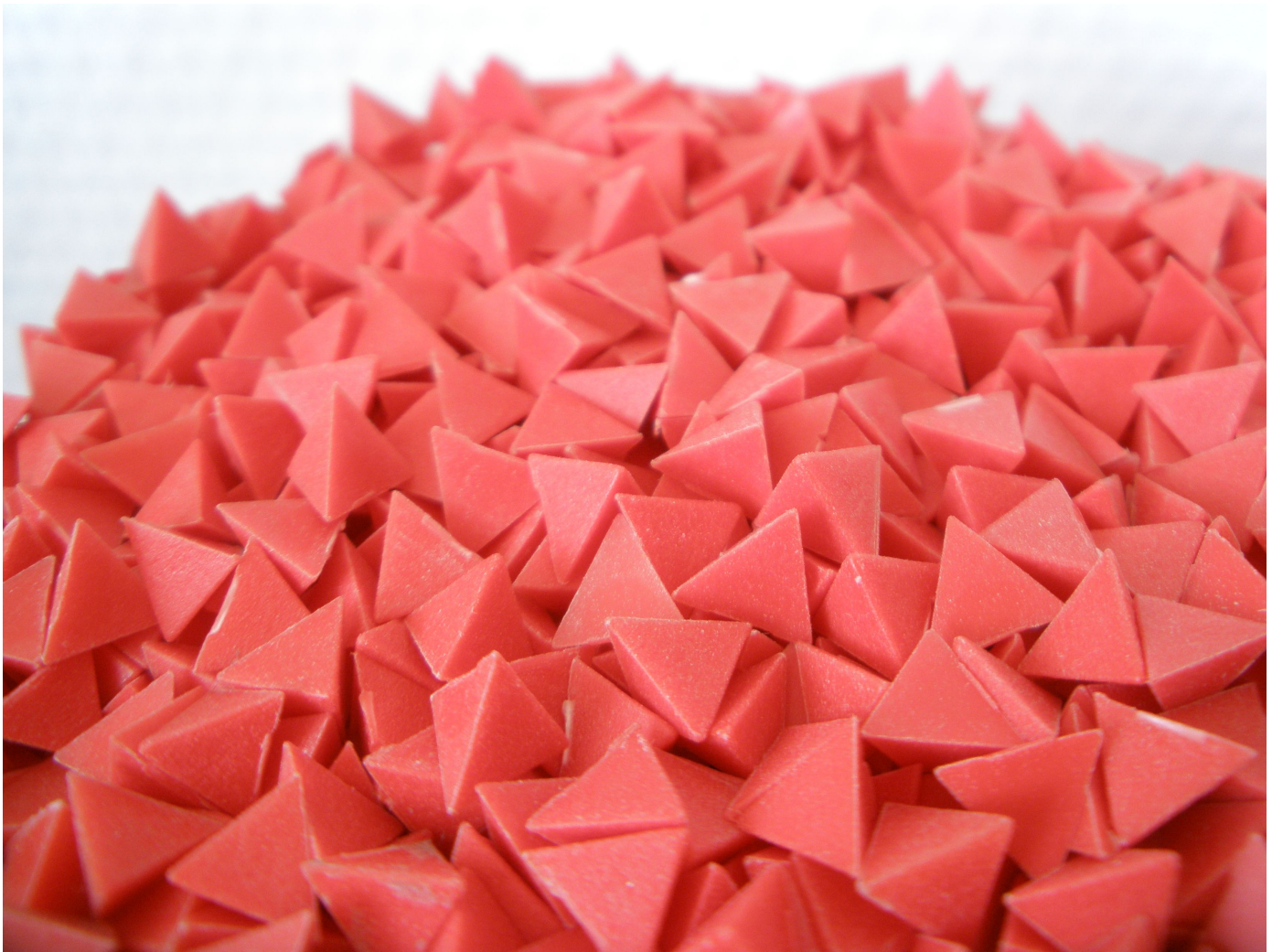


Beyond sphere packings

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Physicist tend to treat any object in a first approximation as a sphere. This approach is also popular in the field of granular physics, but most granular materials like sand, snow, salt or sugar are not comprised of spherical particles. In an first approach to the outside world we study packings of ellipsoids and tetrahedra using X-ray tomography.



We are particularly interested to see if in this systems the onset of mechanical rigidity is indeed linked to the contact number as predicted by the jamming paradigm. We find that like for spheres the existence of friction requires major modifications to this