Egg: a metamaterial



- physical and/or mechanical properties are determined by structure and not by the chemical nature of its constituents
- shell, fragile from inside, solid from outside
- T. Ungerer, IPCMS

Thai football



• Weaved approx. of sphere

• (Mulhouse, Fri)

Negative Poisson's ratio (NPR)



- paper folding (E.F. Sanli, Zanjan 1998)
- folds
- rigid plane rhombi
- (J. Grima, Tues. Mulhouse Fri.)

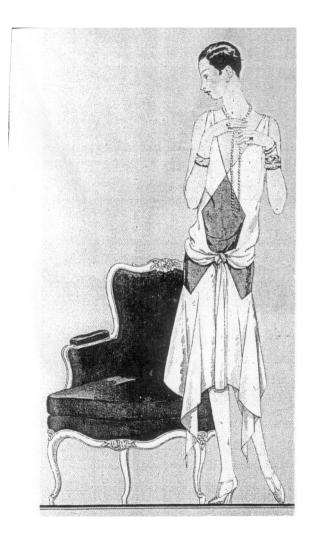
Solid foam made of glass



- Kerroc
- ideal metamaterial:
 owes its essence (strength)
 to its non-existence
 (holes/bubbles at random)

(Bréchet Thursd.)

Mlle Vionnet (Mulhouse Fri.)





Design a worm (Obukhov Tues., Fabry Fri.)

