Carlo.

- (M, g) Riem. mfd $\dim M = n$
→ $R(u,v) = -R(v,u)$
$\langle R(u,v)w, z\rangle = -\langle w, R(u,v)z\rangle$
→ 1st Bianchi: $R(u,v)w + R(v,w)u + R(w,u)v = 0$
→ 2nd Bianchi: $\nabla_u R(v,w) + \nabla_v R(w,u) + \nabla_w R(u,v) = 0$

- of course, $(\nabla_u R)(v,w)z = \nabla_u(R(v,w)z) - R(\nabla_u v, w)z$
$- R(v, \nabla_u w)z - R(v,w)\nabla_u z.$
  → maybe we could be smarter than to write it all out (36 terms.)
  → compute in local coords.? still hard
→ use tensor property to extend v.f.s to
  convenient ones → take constant v.f.s