



# EVEN MORE ON FORMAL GROUPS...

PREVIOUSLY...

- Formal groups  $(\mathcal{F}, F)$   $R$  complete local ring,  $\mathfrak{m} \subseteq R$ :  
 Groups assoc. to formal gps  $\mathcal{F}(\mathfrak{m})$ .
- PROP. Let  $p = \text{char}(k) = \text{char}(R/\mathfrak{m})$ .  
Then, every torsion elt. of  $\mathcal{F}(\mathfrak{m})$  has order a power of  $p$ .
- The invariant differential  $\omega(T) = P(T)dT$  s.t.  $\omega(F(T, S)) = \omega(T)$ .  
 Cor.  $[p](T) = p \cdot f(T) + g(T^p)$  where  $f, g \in R[[T]]$ ,  $f(0) = g(0) = 0$ .
- Formal lo























