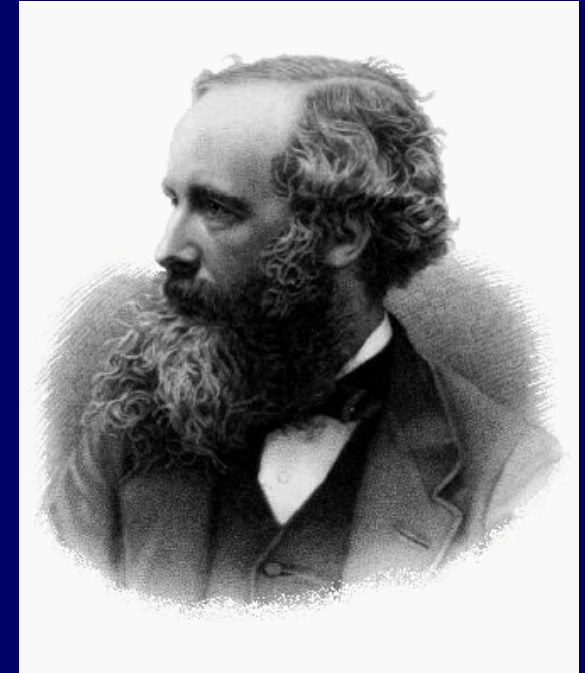


James Clerk Maxwell

(1831-1879)



4 laws unify electric & magnetic forces:

1. **E-field generated by electric charge**
(Gauss' Law – Lecture 2)
2. **No magnetic charges**
(Lecture 8)
3. **E-field generated by changing magnetic flux**
(Faraday's Law – Lecture 10)
4. **B-field generated by moving electric charge
& changing electric flux!**
(Ampere's Law – Lecture 9)

Electromagnetic waves!