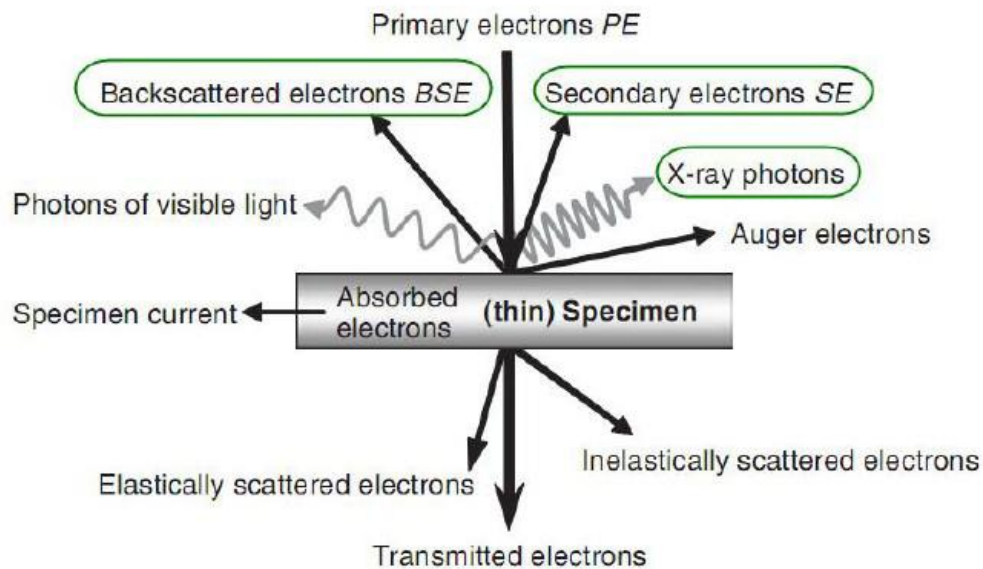


Why we use an electron beam ? (e.g. easy to get from different sources, easy to be "controlled"-speed-up focus...), electron is just a very very tiny matter (both served as particle and wave)...

the detailed interaction of electron beam with sample will be covered in details later.... at the moment, as comparing with what you learned TEM signals, they still could be mainly divided as elastic (BSE, back scattering electron) and inelastic (SE, secondary electron)....



Signal could be detected in electron microscopes

elastic- energy not changed only direction changed after interaction  
inelastic- both energy and only direction changed