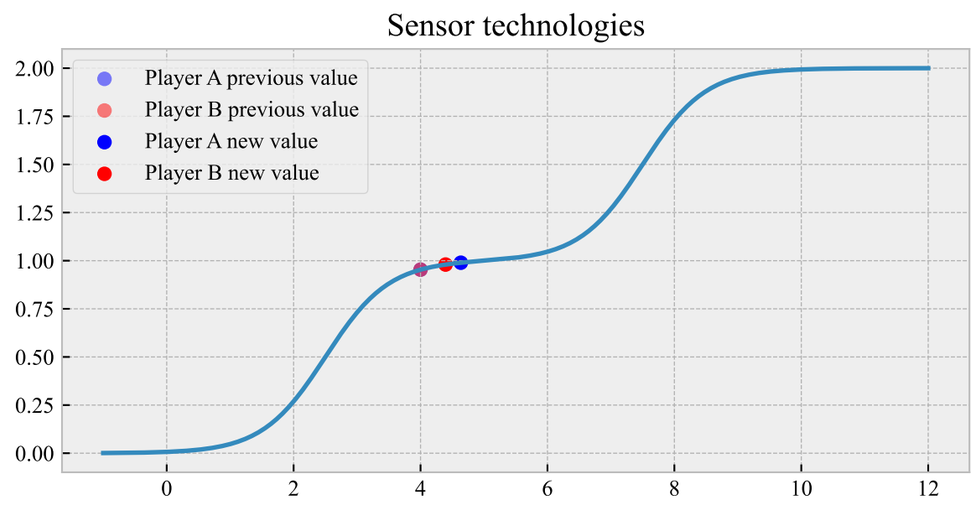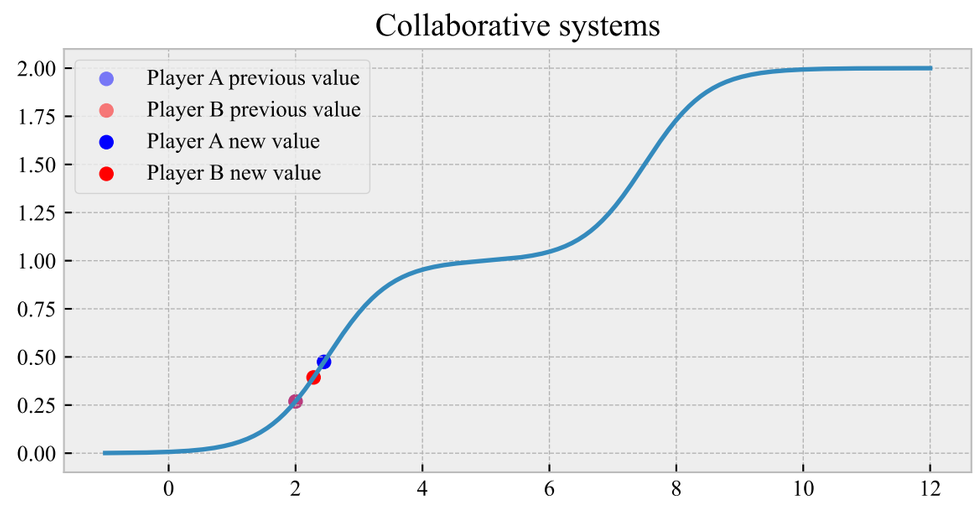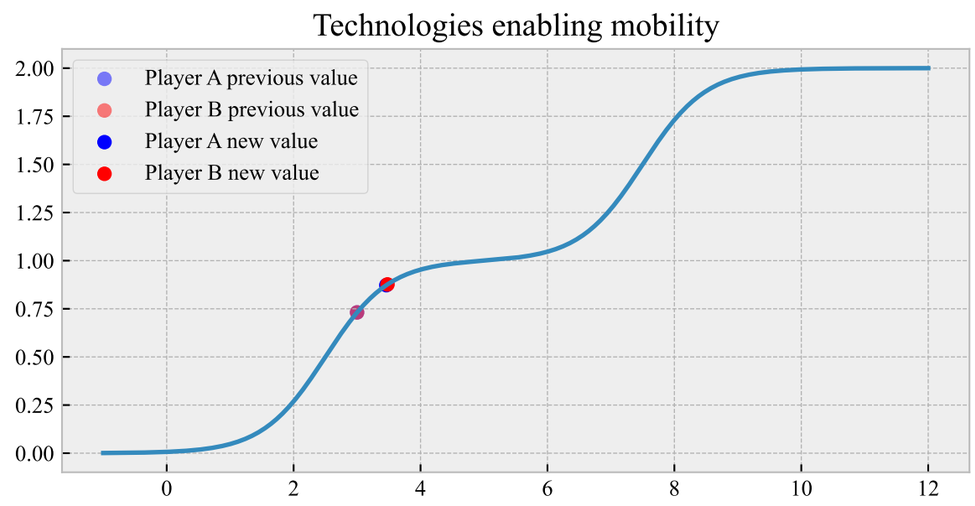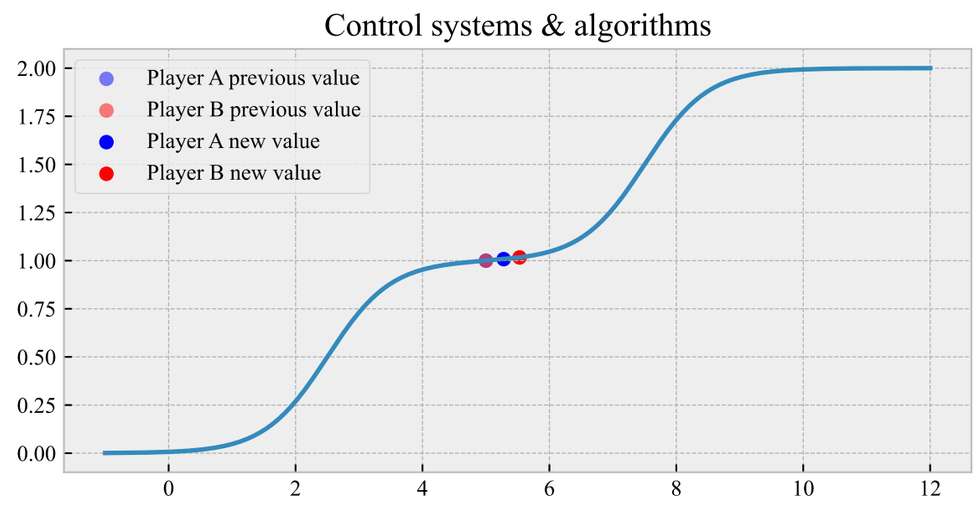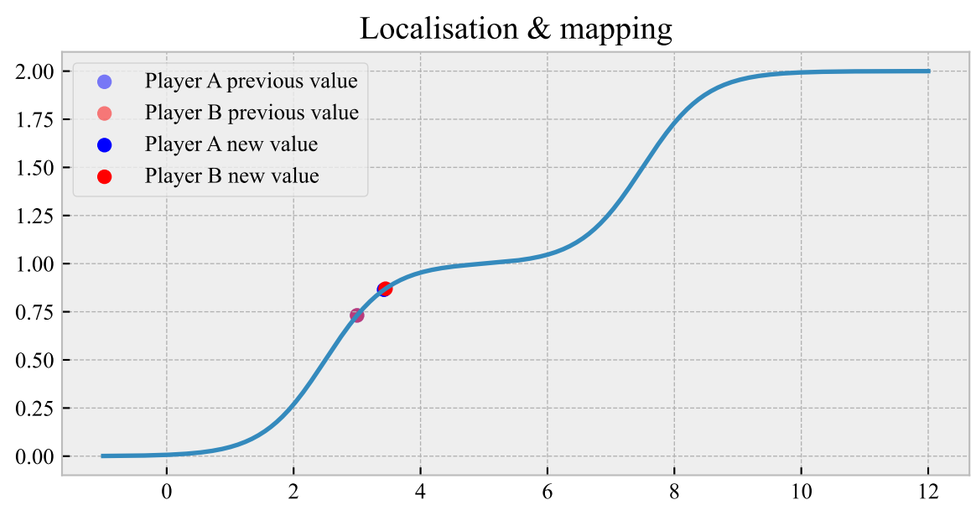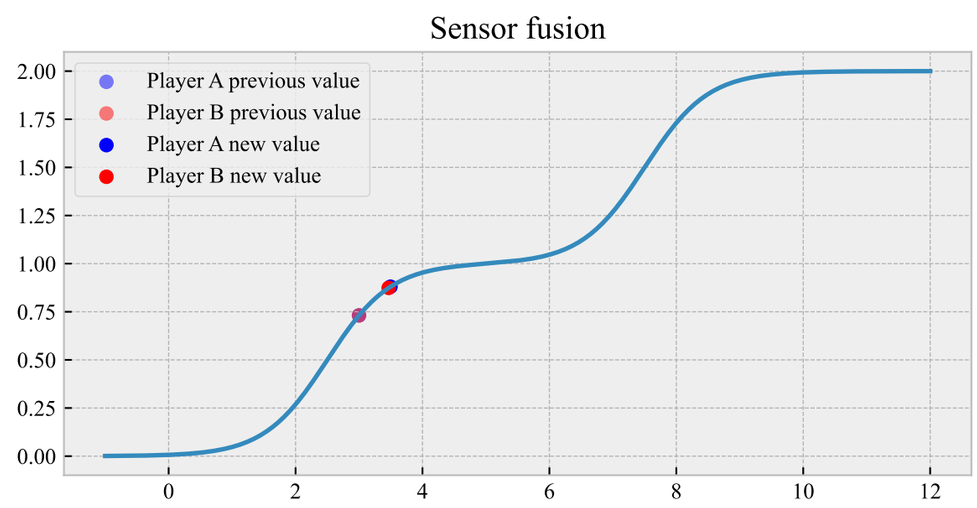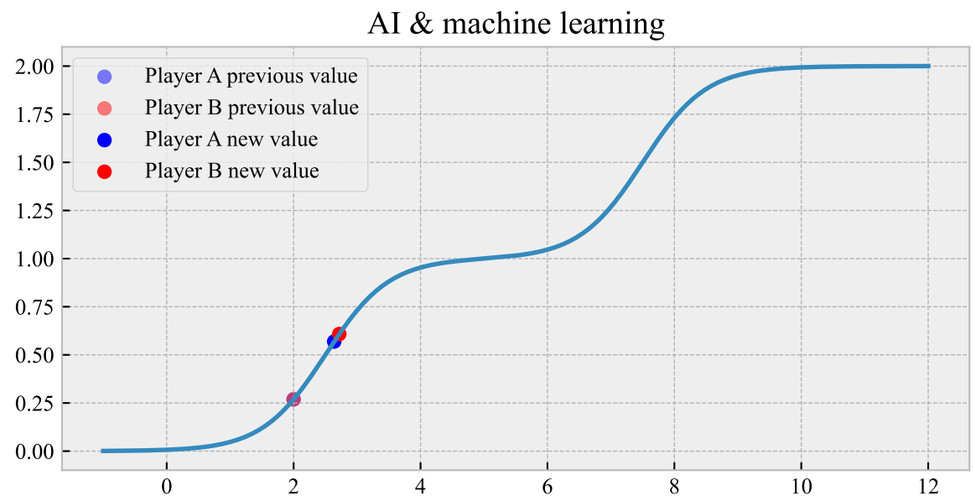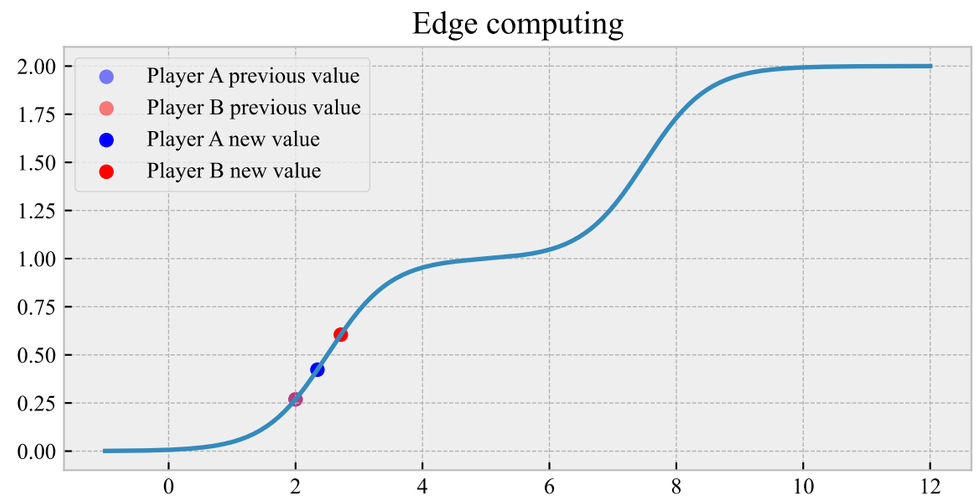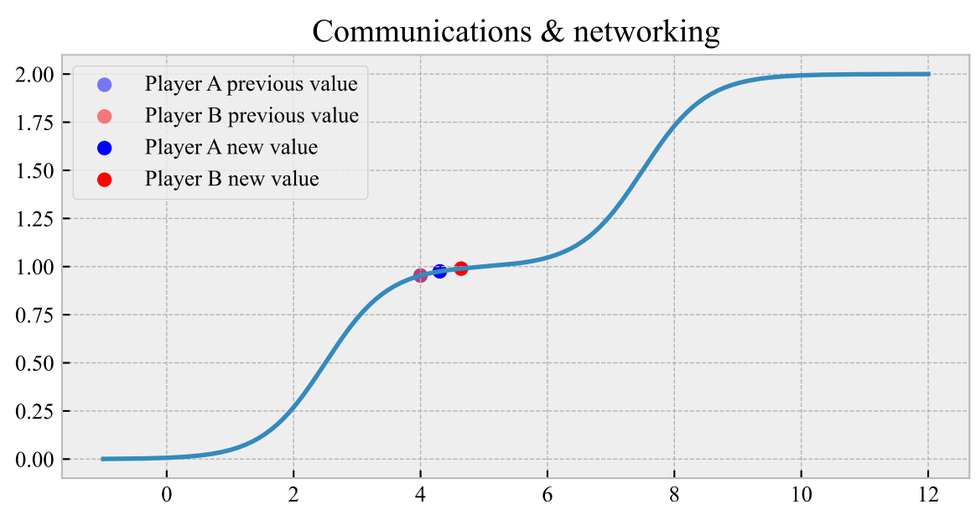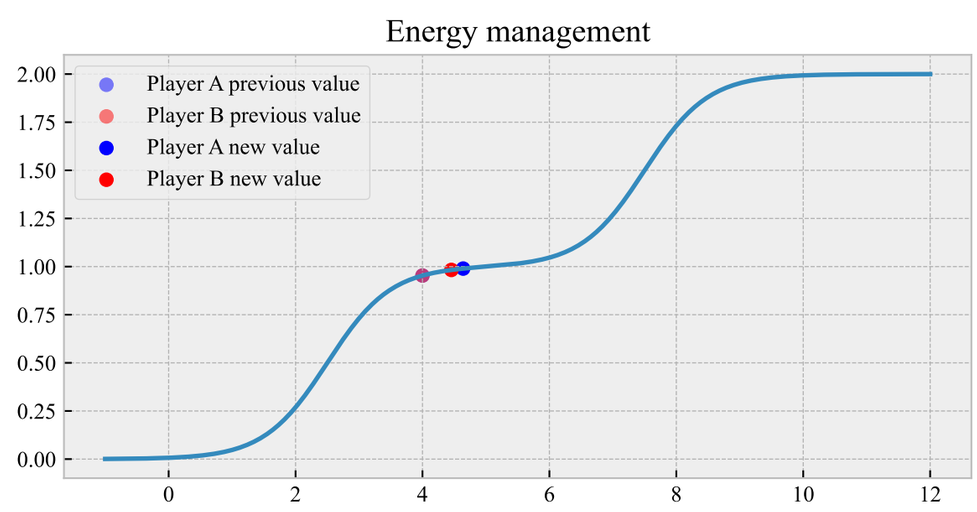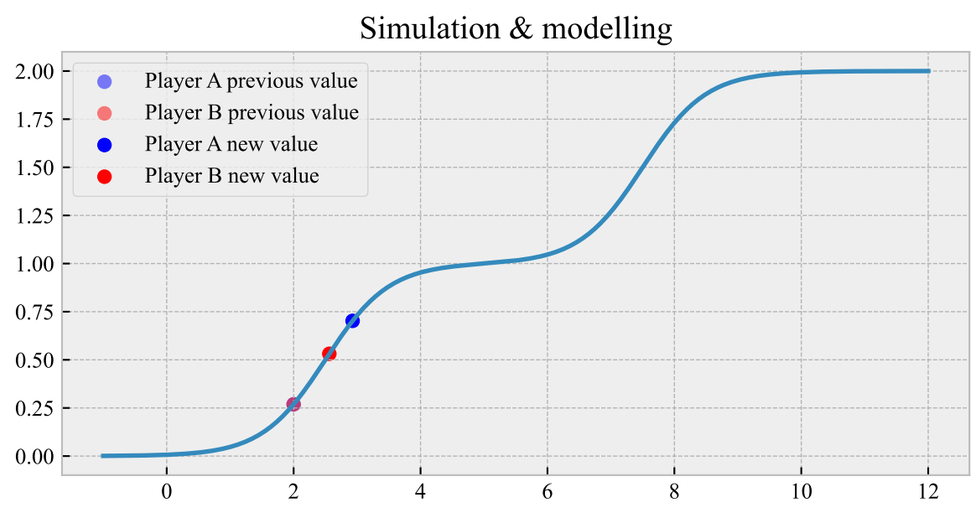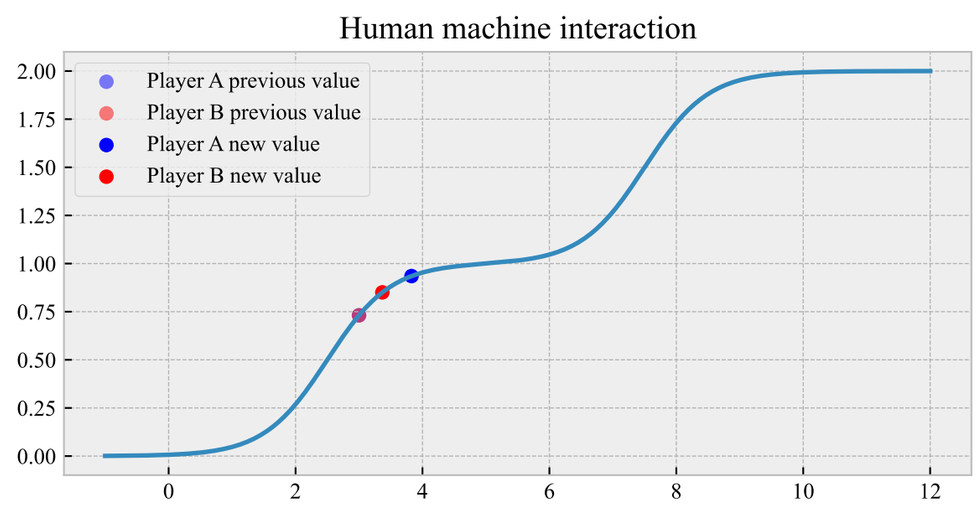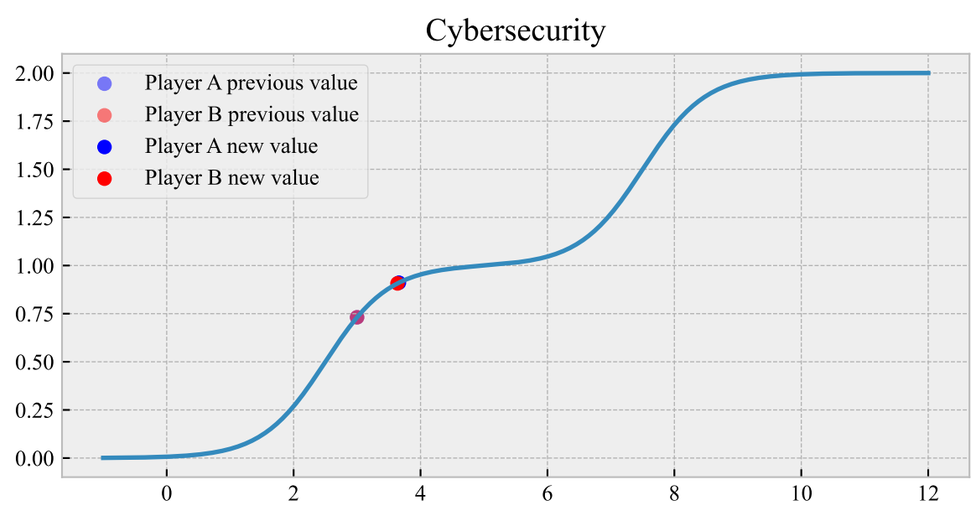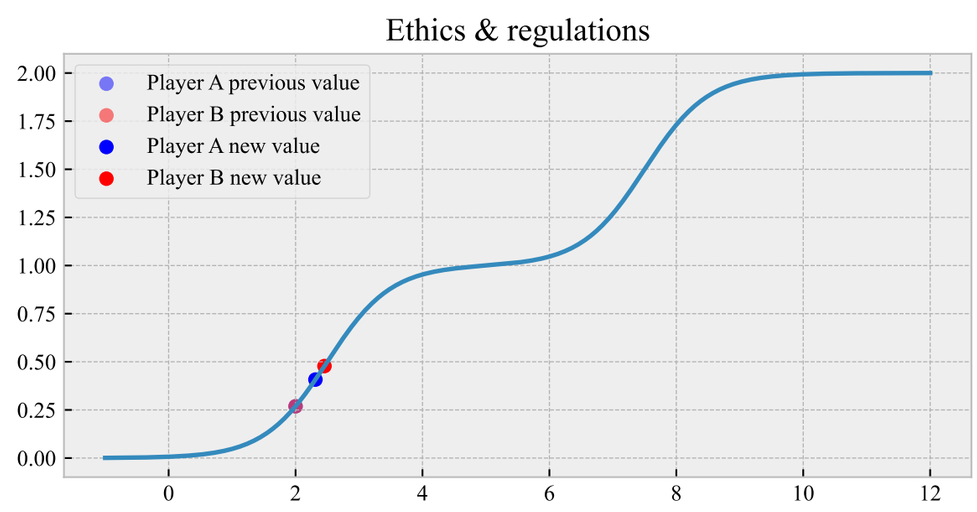Technology research progress throughout full simulation