Several binaries are now established sources of high and very energy gamma-rays. A new class has been identified, gamma-ray binaries, with the particularity that most of their luminosity is emitted beyond 1 MeV. Other types of binaries detected in gamma-rays include microquasars, novae, colliding wind binaries. I'll discuss the origin of the gamma-ray emission in those systems. I'll describe how we try to model the orbital modulations that we observe, including in gamma-rays, emphasising the need to connect with relativistic (M)HD simulations. I'll explain how these binaries provide new information on pulsar physics, accretion-ejection and particle acceleration.