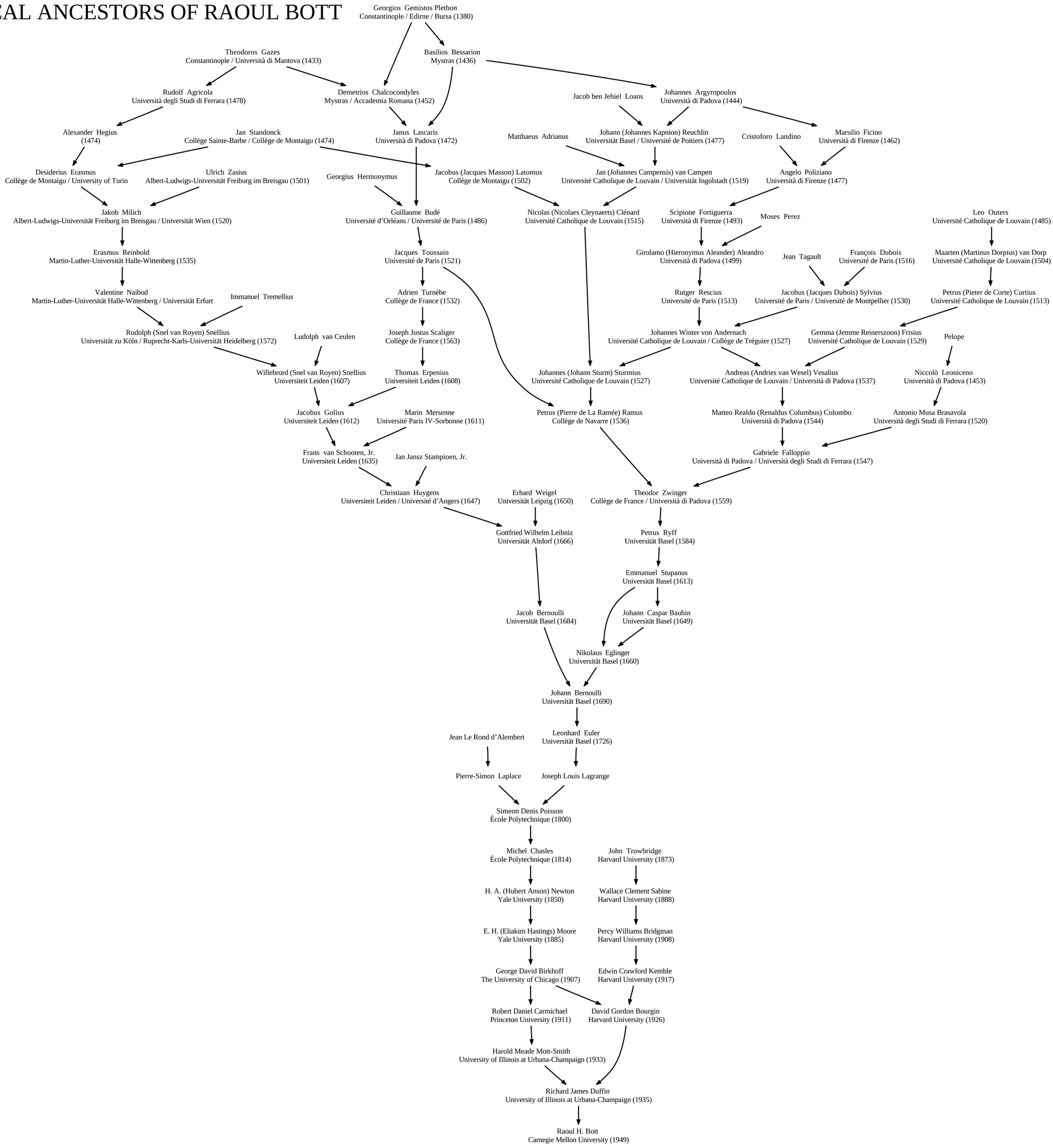THE MATHEMATICAL ANCESTORS OF RAOUL BOTT