

Abstract: Between 1910 and 1930 a large number of astronomical discoveries took place. Henrietta Swan Leavitt revealed the relationship between the luminosity and the period of Cepheids, which then became the indicators for distance determination in the universe. Based on this relation in 1925 Edwin Powell Hubble calculated the distance to our neighboring Galaxy M31. Tireless exploration of the nebulae by Vesto Melvin Slipher brought a very important ratio between the red and blue shifts, where the red ones clearly dominated. In 1927 Georges Edouard Lemaître derived Hubble's law from Einstein's field equations, independently on Alexander Alexandrovich Friedmann. Two years later Hubble definitely demonstrated the linear behavior between the red shift and the distance.