Balance control in human walking: an energetic perspective

Walking, it seems so simple, we do it everyday from our early childhood on. For many patients with neurologic or orthopaedic problems however, walking is not so simple. One of the primary difficulties for these patients is the substantial increase in the energy cost of walking. The nature of this increased cost is often not understood. In this thesis the focus is on the contribution of an essential feature of human walking, which has often been underappreciated when it comes to energy cost: balance control.