Problem: The wheel consists of a $4-\mathrm{kg}$ rim of $250-\mathrm{mm}$ radius with hub and spokes of negligible mass. The wheel is mounted on the $3-\mathrm{kg}$ yoke $O A$ with mass center at $G$ and with a radius of gyration about $O$ of 350 mm . If the assembly is released from rest in the horizontal position shown and if the wheel rolls on the circular surface without slipping, compute the velocity of point $A$ when it reaches $A^{\prime}$.


