



Figure IV.19:  $\mathbf{v}$  and  $\mathbf{w}$  are used to derive the formula for spherical linear interpolation. The vector  $\mathbf{v}$  is the component of  $\mathbf{y}$  perpendicular to  $\mathbf{x}$ , and  $\mathbf{w}$  is the unit vector in the same direction. The magnitude of  $\mathbf{v}$  is  $\sin \varphi$ .