

Chapter 9. Exercise
9.11/2 p. 855

State and explain the Fourier slice theorem. Given the notations $f(x, y)$ for a function in the image domain, $p_\theta(t)$ for a function in the projection or Radon domain, and $F(u, v)$ as well as $P_\theta(\varpi)$ for functions in the frequency or Fourier domain, explain the relationships between these functions.

With reference to the notations provided above, what do the variables $x, y, \theta, t, u, v,$ and ϖ stand for? What are their units?