

Tablo 1. Mellin dönüşümünün bazı özellikleri

Özellik	Fonksiyon	Mellin dönüşümü
	$x(t)$ $t > 0$	$\mathcal{M}(p) = \int_0^{\infty} x(t)t^{p-1}dt$
Ölçekleme	$x(\alpha t)$ $\alpha > 0$	$\alpha^{-p}\mathcal{M}(p)$
Kuvvet	$x(t^\alpha)$ $\alpha \neq 0$ ve reel	$\frac{1}{ \alpha }\mathcal{M}\left(\frac{p}{\alpha}\right)$
$\text{Ln}(t)$ ile çarpma	$\{\text{Ln}(t)\}^k x(t)$ k pozitif tamsayı	$\frac{d^k}{dp^k}\mathcal{M}(p)$
t^z ile çarpma	$t^z x(t)$ z karmaşık sayı	$\mathcal{M}(p+z)$

Tablo 2. Bazı fonksiyonların Mellin dönüşümleri

Fonksiyon	Mellin dönüşümü	
$x(t)$ $t > 0$	$\mathcal{M}(p) = \int_0^{\infty} x(t)t^{p-1}dt$	
$e^{-\alpha t}$ $\alpha > 0$	$\alpha^{-p}\Gamma(p)$	$\text{Re}\{p\} > 0$
$\frac{1}{1+t}$	$\frac{\pi}{\text{Sin}(p\pi)}$	$0 < \text{Re}\{p\} < 1$
$\frac{1}{1-t}$	$\pi\text{Cot}(p\pi)$	$0 < \text{Re}\{p\} < 1$
$\frac{1}{(1+t)^\alpha}$	$\frac{\Gamma(p)\Gamma(\alpha-p)}{\Gamma(\alpha)}$	$0 < \text{Re}\{p\} < \text{Re}\{\alpha\}$
$\text{Ln}(1+t)$	$\frac{\pi}{p\text{Sin}(p\pi)}$	$-1 < \text{Re}\{p\} < 0$
$\text{Ln}\left \frac{1+t}{1-t}\right $	$\frac{\pi}{p}\text{Tan}(p\pi)$	$-1 < \text{Re}\{p\} < 1$
$\text{ArcTan}(t)$	$-\frac{\pi}{2p\text{Cos}(p\pi/2)}$	$-1 < \text{Re}\{p\} < 0$
$\text{ArcCot}(t)$	$\frac{\pi}{2p\text{Cos}(p\pi/2)}$	$0 < \text{Re}\{p\} < 1$
$\delta(t-a)$ $a > 0$	a^{p-1}	
$H(t-\alpha)t^\beta$ $\alpha > 0$	$-\frac{\alpha^{\beta+p}}{\beta+p}$	$\text{Re}\{p\} < -\text{Re}\{\beta\}$
$\{H(t-\alpha)-H(t)\}t^\beta$	$-\frac{\alpha^{\beta+p}}{\beta+p}$	$\text{Re}\{p\} > -\text{Re}\{\beta\}$
$H(1-t)(1-t)^{\beta-1}$ $\text{Re}\{\beta\} > 0$	$\frac{\Gamma(p)\Gamma(\beta)}{\Gamma(p+\beta)}$	$\text{Re}\{p\} > 0$
$H(t-1)(t-1)^{-\beta}$	$\frac{\Gamma(\beta-p)\Gamma(1-\beta)}{\Gamma(1-p)}$	$\text{Re}\{p\} < \text{Re}\{\beta\} < 1$
$H(t-1)\text{Sin}\{\alpha\text{Ln}(t)\}$	$\frac{\alpha}{p^2+\alpha^2}$	$\text{Re}\{p\} < - \text{Im}\{\beta\} $
$H(1-t)\text{Sin}\{-\alpha\text{Ln}(t)\}$	$\frac{\alpha}{p^2+\alpha^2}$	$\text{Re}\{p\} > \text{Im}\{\beta\} $