

The Carmichael function $\lambda(n)$ is defined as the exponent of the multiplicative group $\mathbf{Z}/n\mathbf{Z}^*$. The integer 1936 is the least with the property that it is a value for the Euler φ function ($\varphi(2049) = 1936$) but not for the Carmichael λ function. Analogously, the integer 90 is the least integer with the property that is a value for the Carmichael function ($\lambda(190) = 90$) but not for the Euler function. We will present estimates for the functions that enumerate the integers that are values for the Carmichael function but not for the Euler function and viceversa. It is a joint project with Banks, Friedlander, Luca and Shparlinski.