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We define a new topology on  $C(X)$  and investigate its properties. We call this topology the *regular topology* (or *r-topology* for short) on  $C(X)$  and denote it by  $C_r(X)$ . This topology is finer than the *m-topology*, which in turn is finer than the uniform topology. We investigate and determine for which Tychonoff spaces  $X$ ,  $C_r(X)$  has specific topological properties. In particular, we shall discuss when this topology is first countable and make an attempt at characterizing the character of  $C_r(X)$ . The answers are somewhat more complex than for the *m-topology* on  $C(X)$ .

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