

# $\varphi$ -maps on Hilbert $C^*$ -modules, $\varphi$ -module domains and ternary domains

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For an operator-valued  $\varphi$ -map  $\Phi$  on a Hilbert  $C^*$ -module  $X$  over a  $C^*$ -algebra  $A$ ,  $X_\Phi = \{x \in X; \Phi(xa) = \Phi(x)\varphi(a) \text{ for all } a \in A\}$  is its  $\varphi$ -module domain and  $T_\Phi = \{x \in X; \Phi(y\langle x, z \rangle) = \Phi(y)\Phi(x)^*\Phi(z) \text{ for all } y, z \in X\}$  is its ternary domain. In this talk we will discuss about some properties of  $X_\Phi$  and  $T_\Phi$ .

This is a joint work with M.B. Asadi and R. Behmani.