1106-30-498 **Samaneh Gholizadeh Hamidi*** (s.hamidi_61@yahoo.com), Institute of Mathematical Sciences, University of Malaya, 50603 Kuala Lumpur, Malaysia, 50603 Kuala Lumpur, Malaysia, and **Jay M Jahangiri** (jjahangi@kent.edu), Department of Mathematical Sciences, Kent State University, 14111 Claridon, Troy Road, Burton, Ohio 44021-9500, U.S.A., Burton, OH 44021-9500. *Faber polynomial coefficients of classes of m-fold symmetric bi-univalent functions.* Preliminary report.

Each function $f(z) = z + \sum_{n=2}^{\infty} a_n z^n$ in $\mathcal{S}$ analytic and univalent in the open unit disk $\mathbb{D} := \{z : |z| < 1\}$ generates a sequence of m-fold symmetry functions $g_m(z) = \sqrt[m]{f(z^m)} = z + \sum_{n=2}^{\infty} b_{mn-1} z^{mn-1}$ in $\mathcal{S}$; $(m = 1, 2, 3, \ldots)$. Conversely, every $g_m \in \mathcal{S}$ is the $m^{th} - root$ transform of some function $f \in \mathcal{S}$. Each $f \in \mathcal{S}$ has an inverse f^{-1} satisfying $f^{-1}(f(z)) = z$; $(|z| < 1)$ and $f(f^{-1}(w)) = w$; $(|w| < r_0(f),\ r_0(f) \geq 1/4)$. The Koebe function $k(z) = z/(1-z)^2$ and its inverse map $K(w) = w + \sum_{n=2}^{\infty} ((2n)!/[n!(n+1)!])\, w^n$ are prominent members of inverse univalent functions. Very little is known about the classes of m-fold symmetric bi-univalent functions. An analytic function is said to be bi-univalent in $\mathbb{D}$ if both the function and its inverse map are univalent in $\mathbb{D}$. We use the Faber polynomial expansion to investigate the unpredictable behavior of the early coefficients of classes of m-fold symmetric bi-univalent functions and also give an estimates for the general coefficients of such functions subject to a given gap series condition. (Received August 31, 2014)